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BY

HOLMAN TAYLOR, B. S., M. D.

FORT WORTH, TEXAS

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Texas State Journal of Medicine

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

LAST CALL FOR THE ANNUAL SESSION.

The arrangement committee announces that everything is ready for the Annual Session, to the last detail. The entertainment committee professes to be slightly worried over the failure of one of their most expensive features to materialize, but they claim to have in sight a worthy substitute, which some of the committee profess to believe will be more pleasing to the greatest number of visitors. The reception committee is all ready with its little white badges and the glad hand, and the chairman claims to be drilling them daily and teaching them the most effective way to use the smile that won't come off. The only sub-committee that does not appear to be quite happy is the committee on finance, and the opinion generally prevails that confirmed pessimists are usually selected for positions on this committee, anyway. The information bureau has been organized, and will be found in active eruption at the point indieated in the diagram, published in the April JOURNAL. The registration office is also ready for business, and the badges have already been received. In fact, there remains nothing to be done, so far as the Annual Session itself is concerned, except to begin.

The largest attendance in the history of the Association is confidently expected. The State secretary announces that two weeks prior to the Annual Session more members had paid their dues than ever before. This would argue that times are not so hard with the profession as commonly reputed, and would lead us to believe that money shortage will not seriously curtail the attendance.

We earnestly urge that every member who can possibly get away for the occasion, make it a point to attend the forthcoming annual session. The program is extremely interesting, and should prove profitable to those who are fortunate enough to participate, and the entire occasion will offer the diversion doubtless badly needed by many of our members, and so richly earned by most of us.

ALTERATIONS IN THE PROGRAM.

It is well known to our members that no alteration can be made in the program for the annual session, following its publication in the April JOURNAL, except for the correction of errors committed in its compilation. This rule frequently works a hardship on worthy members who have every right to appear on the program, but who have for some reason neglected to secure a place, and the Association thereby doubtless frequently misses contributions of much value. Hwoever, every member in the Assoeiation can feel assured that the program he receives in his April JOURNAL is exactly what he will find when he attends the session, and he may arrange his time beforehand with the assurance that he will not be disappointed.

In addition to a very few minor and corrective alterations. the following additions to the program have been made:

Dr. O. N. Mayo of Belton, has been placed on the program of the Section on Pathology, with a paper on the subject, "The Report of a Case of Splenic Anemia." This contribution had been accepted by the chairman and inadvertently omitted from the program mailed to the State secretary.

Dr. B. R. Johnson of Gainesville, has been added to the program of the Section on Obstetrics and Gynecology, with a paper, "A Plea for Cleanliness in Confinement Cases." This paper had also been accepted by the chairman of the section in question, and had been inadvertently omitted from the program.

A paper by Dr. Seale Harris of Mobile, Alabama, has been assigned to the program of the Joint Session of Scientific Sections. Dr. Harris had been invited as a guest, had accepted and mailed his title. The acceptance came to hand on time, but the title was delayed in transit until too late for the April JOURNAL. Dr. Harris will speak on "The Early Diagnosis of Pellagra."

NEW RULING ON THE SUBJECT OF FEE-SPLITTING.

In 1911 the retiring President, Dr. John T. Moore, called attention of the Association to the prevalence in this state of the practice of fee splitting. In 1912, at Waco, the House of Delegates amended the State Association by-laws so as to provide that "any member who shall be found guilty of fee-splitting in any of its forms, as defined by the Board of Councilors, shall be reprimanded, suspended or expelled." In October of the same year, the Board of Councilors met in Fort Worth and adopted the following definition of the term "fee-splitting," so as to make operative the amendment referred to:

"Any physician or surgeon shall be deemed guilty of fee-splitting who shall give or receive, or agree to give or receive, a commission; or divide, or agree to divide, a fee for medical or surgical treatment, unless the patient or his or her next friend is fully informed as to the terms of the transaction."

This definition was clear and in accord with the Principles of Ethics of the American Medical Association, as amended in Atlantic City in June of the same year. Both definitions hinge upon the element of secrecy, the opinion prevailing that the better element of the profession would not openly indulge in such practices, and that those who aspire to professional standing would be forced to follow suit. The Principle of Ethics as amended, is as follows:

"Section 3, Article VI. It is detrimental to the public good, and degrading to the profession, and therefore unprofessional, to give or receive a commission. It is also unprofessional to divide a fee for medical advice or surgical treatment, unless the patient or his next friend is fully informed as to the terms of the transaction. The patient should be made to realize that a proper fee should be paid the family physician for the services he renders in determining the surgical or medical treatment suited to the condition, and in advising concerning those best qualified to render any special service that may be required by the patient."

It seems now that our Board of Councilors, individually and collectively, have experienced some difficulty in controlling the situation, because of the ease with which anyone accused of fee-splitting can plead the degree of publicity required. The courts of the Association are not authorized to administer oaths, and are not in the same attitude toward our members that law courts occupy, and a good deal must always be taken for granted in our efforts to exercise discipline. At the same time, no one wants to take any chances in the matter of working a hardship or imposing an injustice on a member, which requires that any element of doubt be decided in favor of the accused, always. It is doubtless true that the average individual is inclined to shield his friend, the physician, under a charge of this character, if it can be done without actual perjury, even though the same individual in the beginning has stated that he knows nothing of the circumstances of a fee that has been divided. Incidentally, there are those who make no secret of their fee-splitting practices, and, indeed, who defend the practice and openly bid for work on this basis. Considering the prominence of some of these, it can be readily seen that complications are likely to arise in administering the affairs of ethical medicine in some of our larger communities, and in hospital practice. Some of our country societies have gone a step further than the decision of the Board of Councilors, above referred to, and have adopted amendments to their several constitutions and by-laws, forbidding the practice of fee-splitting, whether secret or otherwise. With these difficulties before them, and doubtless others, the Board of Councilors have made a new definition of the term "fee-splitting" or "fee division," as follows:

"The term 'fee-division' shall be understood to include any arrangement between physicians in a case, by which the fees paid for services rendered are divided in any manner. A physician shall be

deemed guilty of 'fee-division' who gives or offers to give, directly or indirectly, any money or other thing of value, to any physician or other person, for referring a case to him or her; or who receives or offers to receive, any money or other think of value, directly or indirectly, from any physician or other person having a case or cases referred to him or her. Nor is it proper for one physician to fix the fee for another, or employ the referring physician as an assistant as a subterfuge in evasion of the provisions of this ruling.

"Provided, that this ruling is not to apply to special or routine laboratory work, *x*-ray examinations, fitting of apparatus, or to special expert opinion, sought by the attending physician. In such cases, only, the fee may be charged either to the attending physician and remitted to the person rendering the service, or to the patient direct; provided, that the fee so collected and remitted by the attending physician, and the fee or fees charged to and collected directly from the patient so referred, by the person rendering such services, are not divided in any manner contrary to the ruling herein announced."

Essentially, this ruling is that every physician shall attend to his own affairs, and make his own charges and his own collections, for any service he has rendered the patient. If the physician employes a pathologist, an *x*-ray worker or anyone else, to assist him in making a diagnosis, he can pay them out of his own pocket, making with the patient whatever arrangement he chooses to make; or he may direct the patient to settle with the pathologist or others rendering service, in any manner that may be agreeable to those concerned, provided that he received no rebate or commission or portion of the fee so paid. This would all seem to be quite clear, and there can be no misunderstanding or reasonable ground for evasion.

It is our understanding that the Board of Councilors recommends the incorporation of this ruling as a by-law for county soeieties, in order that cases presumed to be in violation of the State Association law against fee-division, may be settled at home, and without the necessity of coming up on appeal to either the Councilor or the Board as a whole. While it is not our province to doubt the wisdom of the Council in its advice, if it is the advice of the Council that this be done, we are rather of the opinion that the ruling if kept before the county societies, will accomplish the same result as if it were made a portion of the by-laws thereof. In view of the fact that the Board of Councilors can change its ruling at any time it sees fit, either requiring more or less in this particular, it would probably be best to leave the situation under more flexible control than a stated by-law would exert.

CAN THE PRACTICE OF FEE-SPLITTING BE CONTROLLED?

There no longer seems to be any question among reputable physicians as a whole as to the ethics and the justice of the practice commonly known as fee-splitting. True, spasmodic efforts have been made in different parts of the country to justify the practice, but the opinion of the profession has been so overwhelmingly to the contrary that such efforts have been short lived, and those who have stood sponsor for them have had to speedily take to cover. Nor has the agitation of this question been confined to medical circles. On the unassailable ground that this form of commission giving is nothing more nor less than a trafficking in human life and health, the law-making bodies of this and other countries have taken up the problem, wherever the laity have become acquainted with the facts in the case. New Zealand has long had a law forbidding the practice, and there is at the present time on the statute books of the State of Texas a law which forbids "any person who practices medicine or the art of healing the sick or the afflicted, with or without the use of medicine," to employ or agree to employ, or pay or promise to pay, "any person, persons, firms, association of persons, co-partnership or corporation, for securing, soliciting or drumming patients or patronage." Michigan has a law which provides for the revocation of the license of "any registered practitioner who shall pay or present money, or other valuable gifts for bringing patients to him.' In 1913 the state of Nebraska adopted the following law bearing upon the subject:

"Section 1. (Doctors dividing fees.) It shall be unlawful for any physician or surgeon to divide fees with, or to promise to pay a part of his fee to, or pay a commission to any other physician or surgeon or person, who calls him in consultation or sends patients to him for treatment or operation. Any physician or surgeon who pays or receives any money prohibited by this act shall be punished by fine of not more than one hundred ($100) dollars, and be liable to a civil action to the patient for the full amount received."

There may be other laws in other states bearing upon the subject, with which we are not at the present time familiar. The point is, that if the medical profession does not put a stop to this practice, the people will, and to our shame.

The efforts on the part of the profession in other states, as in Texas, is to so interpret the practice of fee-splitting as to insure conviction. There seems to be no argument as to the principle of the thing. The Nebraska State Association created a special standing committee to consider the subject, and that committee issued the following pronouncement, which was approved by the Nebraska Association Board of Councilors:

"In order that there may be no misconception as to what is meant by this resolution, the Board of Councilors hereby specifies that where a patient is referred by one physician to another, neither one shall handle or transmit any part of the patient's funds which is to go to the other. Each physician must render a separate account for his services as operator, councilor, companion, anesthetist or assistant, and neither physician shall in any such case collect or transmit any part of the other's fee. Failure to observe this rule shall be considered *prima facie* evidence of fraud. The Board realizes that in making this interpretation of the resolution it will prevent a number of perfectly innocent transactions, but it feels that such interpretation is necessary to prevent fraud in the guise of innocence. It is not meant by this, however, to prevent a surgeon or specialist from including in his bill the accounts of his ordinary assistants, provided that they are not concerned in the reference of the case in question. Nor shall it be held to prevent any physician from collecting the fee for *x*-ray or other laboratory work done for him by another, provided that the amount of such collections be specified in the bill."—*Western Medical Review.*

The Kentucky Association recently amended its by-laws to provide that no one may become a member unless he signs and keeps inviolate the following pledge:

"I hereby promise upon my honor as a gentleman that I will not, so long as I am a member of the Kentucky State Medical Association, practice division of fees in any form; neither by collecting fees for others referring patients to me, nor by permitting them to collect my fees for me, nor will I make joint fees with physicians or surgeons referring patients to me for operation or consultation, neither will I in any way, directly or indirectly, compensate anyone referring patients to me, nor will I utilize any assistant as a subterfuge."

It will be observed that Kentucky, Nebraska and Texas, at least, are striving to the same end, and all have departed from the interpretation of the American Medical Association, which recognizes publicity as a cure for the evil. The whole question seems so far to have been principally a matter of concern of the leaders, particularly among organized bodies, by common consent of the rank and file of the profession. This is all very good so far as it goes, but the rank and file had better concern itself more generally, at least more audibly, with this problem, if it is to be solved and the abuse controlled before our law makers feel it incumbent upon themselves to further meddle with the affairs of medicine, about which they usually know little.

THE MAINSPRING OF FEE-SPLITTING.

Aside from the multiplied arguments for and against fee splitting, the poverty of the medical profession generally and the comparatively excessive fees paid the so-called specialist, constitute the basis and the mainspring of the practice. Because of this condition of affairs, the consultant frequently finds it an easy matter to persuade the conscientious general practitioner that it is not only justifiable but entirely proper, to turn back to him a portion of the fee collected from a patient that has been referred, and who probably will not for some time to come be able to pay the attending physician even the small fee due him, because of the amount necessary to secure the services of the specialist, which is usually cash in advance. The real solution of the problem is, for the general practitioner to become so expert in the matter of diagnosis and treatment that the specialist will sometime find it convenient to call upon him for assistance, under which circumstances the laymen will soon expect to pay the physician as well as the specialist, an expert fee. It is too frequently the case that those of us who do not do special work, have permitted ourselves to pose in the estimation of our patrons as a sort of super-trained nurse rather than a highly trained and talented physician. Once we have corrected this fault, by perfecting our knowledge and technic, we will be in a position to demand of the consultant an equal opportunity in the matter of fee collecting if not in fee charging. The experts do a great deal

for either a reduced or a deferred fee, when a patient comes to them direct. Why should they not do the same thing in the matter of patients referred to them by other physicians?

There is another cause which is somewhat fundamental, and which is clearly brought out in an editorial on the subject in *The Journal of the Indiana State Medical Association,* February, 1915, in a statement there quoted, which is self-explanatory, and is as follows:

"For years I took my surgical cases to a surgeon of ability and never asked a favor from him. I overlooked the fact that the surgeon often took from my patient a fee that absolutely prohibited me from getting anything for my services, or, if receiving anything, being obliged to wait a long time before getting it. I also overlooked the fact that when the patient got into the hands of the surgeon I was lost sight of entirely—ignored, if you please—and not even shown ordinary professional courtesy at the hands of the surgeon. All this I tolerated because I felt that I was serving the patient and I knew that the patient's interests, so far as his surgical condition was concerned, were being cared for in a highly satisfactory manner. But I finally came to the conclusion that all *good* surgeons were not so much inclined to 'hog it all' as the one to whom I had been referring my surgical cases. In a spirit of revolt I finally took a patient to another surgeon of excellent repute and with a reputation for fair dealing. Much to my surprise he discussed with me all the various phases of the case and treated me as a consultant. He outlined what he proposed to do and insisted that I should remain for the operation, which was fixed for a time when I could be present. I was invited to stand at the surgeon's side and watch the operation, and was accorded every courtesy that could be extended to a consultant. At the completion of the operation the husband of my patient asked the surgeon for his bill. he surgeon replied, 'Arrange for the payment of your family physician and then come and see me about the payment of my fee.' Following the operation I was kept posted as to the progress of the case, and when the patient returned home I was given some suggestions as to further care. Since that time I have referred to the same surgeon numerous cases, and whether I went with the patient or not, I have had always what I call a 'square deal.' Now I don't want any surgeon to pay me a commission, and he would insult me if he offered a commission. Neither do I want him to collect my fee for me under any guise. I want to reserve the right to charge what I think my services are worth, but I don't want the surgeon to ignore me altogether the minute he gets his clutches on my patient, thus belittling me, to say nothing of putting me in a position whereby, in many cases where the patient is of moderate means, I stand no chance whatever of getting any compensation. The surgeon does not have to entertain me at his home or the club in order to prove that he is a good fellow. Neither does he have to ask me to clean up for the operation and then put a retractor in my hand to hold and falsely represent it as assistance for which he is willing to pay. I realize that the surgeons' trained assistants are the ones to render assistance if the surgeon is to do his best work and the patients interests are to be safeguarded. But what I want to be shown is ordinary decency and professional courtesy. As to the matter of fee, I will take care of that, but I want the surgeon to recognize the fact that if he is entitled to a fee, so am I, and he should consider the conditions in a manner that will make it possible for me to receive adequate compensation and still maintain my self-respect."

We feel that no further discussion of the subject is necessary at this time. We trust our readers will appreciate anew the importance of the problem, and set themselves to its solution. We were somewhat surprised recently to note an extended discussion on the subject, in one of our district societies, in which several of our most prominent members expressed a desire for some authentic definition or interpretation of the practice of fee-splitting. This interpretation had already been given and extensively commented on, to which we now respectfully add the above discussion.

MINERAL WELLS ADVERTISING TO BE CENSORED.

The announcement comes from Mineral Wells that through an arrangement between the Commercial Club of that city and the Parker-Palo Pinto County Medical Society, henceforth all advertising literature and the labels for the bottles in which Mineral Wells water is sold, will be censored by a committee representing the society. This movement has been on foot for a number of months, and the details have been carefully worked out, to the satisfaction of both the medical profession and the well owners. The JOURNAL management has had to do considerably with the subject of ethical advertising, and is in a position to say that the results in this case are good beyond all expectations. Whereas the label formerly said, to select one of the most modest:

"In cases where the kidneys are involved ——— should be used very freely. When the kidneys act freely increase the amount by frequent drinking, provided action is not too severe on bowels. For Bright's disease, rheumatism, stomach troubles and

general debility, drink small quantities at frequent intervals, limiting the amount by results. This water has proven beneficial for female complaints,"

The label now says:

"This is a natural saline, alkaline mineral water —laxative and freely diuretic. The average person requires from six to fifteen glasses per day, but there are those who need less and others for whom this quantity will not suffice. Hence, drink just such quantity as gives the desired effect, if small or great. One to three glasses taken hot half hour before breakfast will be found very effective. This label censored by the Parker-Palo Pinto County Medical Society."

This is revolutionary, to say the least of it, and Mineral Wells water may justly be said to have lifted itself from the patent medicine class, and become that which nature intended it should be, the legitimate therapeutic agent of the medical profession.

Concerning the history of this movement, much of interest might be said, and much good might come of the recitation thereof. However, space will not permit, and if any other health resort in this or other states, or any other medical society embracing within its jurisdiction a health resort of merit, cares to know more of the details, we will be glad to put them in touch with the proper parties, and will assist in every way possible to bring about the same splendid results that have so gratifyingly crowned the efforts of the profession and the commercial interest of Mineral Wells. Perhaps it is not too much for us to say that the profession of Mineral Wells have long felt keenly the stigma unconsciously and undeservedly coming to them by virtue of certain advertising methods of the commercial interests of their city, and their desire to rise above this has been keen. We recall a conversation some time ago, in which a prominent physician of Mineral Wells had been asked why none of the profession had ever urged in our medical societies the value of water coming from their wells. The reply was, that whenever any of them arose to their feet for this purpose, they instinctively felt that suspicion of commercialism was directed toward them, because of the intense and largely unintentional exaggeration of the advertising put out by the various well owners. If we are correctly informed, practically every well in the city is owned by some one who has been cured by its water, and it is not surprising that their faith in its efficacy should be great. There may be those who are exaggerating the efficacy of their particular output for commercial purposes but it is fair to assume that a large part of the exaggeration is purely psychological and quite natural. The truth of the situation is, that moderate claims will get as much patronage for a health resort as those of the most exaggerated character, and the good will of the medical profession will help materially. The profession of this state has never doubted the value of hydragogue purgatives, particularly if administered under the most favorable surroundings, such as a typical health resort usually knows how to build up, but in the case of Mineral Wells these advantages have heretofore been largely handicapped by the general opinion existing in the profession that every effort is made by the well owners to induce their patrons to depend upon them too largely for a service they may or may not be in a position to render.

We commend the example set by the Mineral Wells Commercial Club and the Parker-Palo Pinto County Medical Society and hasten to assure our readers that we have no other object in commenting on this situation than that this resort may regain its favorable position in the estimation of the ethical medical profession of this state, which it under the circumstances deserves, and that other health resorts may profit by the example.

TEXAS ON THE WINE OF CARDUI MAP.

Commenting on the Wine of Cardui situation, we recently made the observation that so far Texas had not been honored by the representatives of this delectable concern. We were hopeful that Texas physicians stood so high in the estimation of these people that they would not consider it worth while to attempt to hoodwink us into statements that might be used against the American Medical Association and those agencies for the good of the public health against which libel suit has been filed, but we were sadly mistaken. A letter from Dr. J. M. Still of Kemp, informs us to the contrary. We desire particularly to commend Dr. Still's judicious handling of the situation, and we are pleased to present herewith extract from his letter. It will be noted that the usual effort was made to induce Dr. Still either to state that he had used the medicine or that he knew of no case in which it had been used as a beverage. It will also be noticed that the desired information was obtained from the druggist, but that it is Dr. Still's opinion that it will not be used. The letter follows:

"I note what you have to say on page 448, State JOURNAL for March, in reference to Wine of Cardui. I had a gentleman who claimed to be a representative of that company call on me a week ago. He wished to know if I ever used the medicine in my practice, and what I knew of it. I informed him that I never used patent medicines and therefore knew nothing of it. He wanted to know if I knew of anyone using it as a beverage. I asked him why he did not consult the druggist. I learned that he called on the druggist, and that the druggist informed him that he had known of at least one person using it for that purpose; but I guess he did not make use of this information."

ORIGINAL ARTICLES

THE SURGICAL TREATMENT OF PUERPERAL INFECTION.*

BY

C. JEFF MILLER, M. D.,

NEW ORLEANS, LOUISIANA.

In selecting for discussion the subject of the surgical treatment of certain phases of puerperal infection, I fear I may have laid myself open to the charge of presenting a hackneyed theme; but the complications of obstetric practice are always with us and we should frequently take stock of our results in order to discard the useless remedies and profit by the experience of those who are endeavoring to crystallize some of the numerous suggestions into a working basis.

There is probably no phase of infection so generally misunderstood as puerperal infection. Strictly speaking, puerperal infection differs very little from infection elsewhere in the body. The difference consists mainly in the infinite gradations of the infection and the more numerous varieties of offending bacteria.

It has been exceedingly difficult to formulate indications for treatment, because we have no reliable clinical or bacteriological guides as to the prognosis of a given case. The only lesion may be a simple perineal tear through which infection may travel to the parametrium, resulting in infiltration or abscess, or by way of the lymphatics to the peritoneum. It may be localized in the uterus, tubes or ovaries, or become systemic through the numerous blood channels in the uterine walls. If the latter route is chosen, the patient may rapidly succumb from acute septicemia before lesions may be recognizable, or the infection may extend slowly and assume the form of chronic pyemia. One of these types may suddenly assume one or more phases of the other and the condition become in suceession an infection of every pelvic organ.

The protean features of puerperal infection promptly suggest the difficulties of formulating surgical indications. The conscientious surgeon will wonder whether a given case would not have recovered without operation; in another instance he will regret that his timidity caused him to desist when he might have saved a life.

In recent years we have been more concerned with the morbidity rather than the mortality of puerperal processes. We are able by virtue of statistics to state the average mortality that should prevail in well-conducted obstetric practice, but no data exists that tells us the actual morbidity rate, even in the best clinics. It is with the idea that we should leave our women in as good condition after labor as before, that we should strive, and we should be willing to tell the truth about the lesions found years after confinement. When we have done this, it will be possible to establish general principles of treatment that will be more readily acceptable to the rank and file of the profession.

Can it be said that the mortality from puerperal infection has been materially reduced and, if so, what new technic has been suggested that has accomplished better results? I think the answer can be stated in a few words. The mortality has been markedly reduced by paying strict attention to the local types of infection, recognizing the importance of laboratory assistance in determining the nature of the infection and abandoning active intra-uterine treatment, especially as soon as it can be determined that infection has spread beyond the endometrium.

Unfortunately, bacteriological examinations are yet far from satisfactory; but from positive findings we at least obtain information of vast importance from a diagnostic standpoint. If the pathologist reports streptococcic infection, the curette, frequent intrauterine irrigation, or gauze packs, would not only be useless, but almost criminal. If bacteremia is shown to exist, major surgical procedures must be abandoned. Curettage belongs to the age when it was thought possible to eradicate the typhoid organism, or the pneumococcus, with antiseptic measures.

Ordinarily, the endometrium is the structure involved and the lesion is localized in the uterus, the condition becoming either putrid or septic endometritis, according to whether the invading bacteria are putrefactive or pyogenic in character. The knowledge that the uterus contains debris is sufficient argument for the average obstetrician to urge curettage, without considering what is really happening inside of the uterus. Polak has recently described in a few words these changes, and I quote his description:

"Nature protects the organ against the invading organisms by the formation of a definite layer of leucocytes and small round tissue cells which are deposited between the infected area and the underlying normal tissue. This layer is more or less well developed in all inflammations of the endometrium, except when the infecting organism is a streptococcus of the hemolytic type. When the organism is of this type, it will pass through the walls of the uterus, either by the lymphatic channels or blood vessels with little or no local reaction, and reach the peritoneum or blood stream within a very few hours. Infection of such virulence cannot be

*Read by invitation before the Section on Gynecology and Obstetrics, State Medical Association of Texas, Houston, May 13, 1914.

checked by any form of intrauterine treatment. These statements allow of no dispute; consequently, if we but stop for a moment to consider the analogy between the obstetric wound and wounds in other locations, it is hard to conceive how surgical intervention within the uterus has been so long countenanced. Any injured surface resists infection by the same process, *i. e.*, by the formation of a granulation zone; therefore any intrapelvic or intrauterine manipulation made during the acute stage of a puerperal or post abortal sepsis must always break down and disturb nature's protective barrier and permit the dissemination of infection through freshly abraded or penetrated surfaces."

For the past two years I have practically dispensed with intrauterine treatment in acute septic endometritis, except in cases associated with uterine hemorrhage. In the latter cases a uterine pack of iodoform gauze will control bleeding and the retained masses are usually discharged when the gauze is removed.

We wish to limit infection, secure drainage and maintain uterine contraction. This can be accomplished by postural drainage by Fowler's position, the use of ergot and pituitrin and the use of ice-bags over the abdomen. Only after the local barriers are strong enough to resist invasion should we attempt to remove retained debris. De Lee believes that it is safe only after the temperature has been normal for two weeks, and my experience confirms his contention.

It is needless to add, after the above statements, that the curette has no place in the treatment of simple puerperal infection and I believe its use will eventually be viewed in the light of a criminal procedure.

Just as the curette has been found to be dangerous, frequent irrigation of the uterus has been found useless. Daily irrigation of the uterine cavity no longer receives general sanction. The physician is too often prompted to irrigate in order to satisfy his conscience that something is being done, and just as often there may follow a daily chill and flurry of temperature, to say nothing of the discomfort caused the patient by turning her in bed, or transferring her to a table.

Patients admitted to my obstetrical and gynecological service presenting a history of puerperal infection are carefully examined to determine if the infection is confined to the genital tract and, if possible, the actual lesion, and whether it has already extended beyond the uterus. These facts can usually be determined by the condition of the uterus, the parametrium and the peritoneum. A blood count is made to determine the natural resistance of the patient and cultures are made in order to ascertain whether bacteremia is present. If the uterus is well contracted and the cervix closed there is no indication for exploring the uterus, even to obtain bacterial cultures. If the uterus is flabby and the os patulous, the culture smears are gathered and the finger introduced for exploration. If membranes or debris can be easily reached they are removed; otherwise nothing more is attempted in the nature of local treatment, except a hot vaginal douche, until the acute symptoms subside. The uterus may then be emptied, if necessary, with the finger, gauze or iodoform pack as the indications demand.

Unfortunately, many cases are never seen until the infection has spread beyond the uterus, either because of the virulence of the infecting organisms, or by too active local treatment. We then have various lesions that tax the judgment of the most experienced surgeon. Whether to still adopt a waiting policy, or resort to some radical procedure is the question now to be debated.

One of the most frequent lesions is pelvic exudates or, more correctly speaking, peri and parametritis. The prognosis is usually good in such cases and exudates in nearly all cases entirely disappear by absorption. Watkins very correctly states that in non-puerperal cases gynecologists agree that operation should seldom be done in the acute period of the disease. There is less indication and more objection to operation in acute puerperal than in acute non-puerperal cases.

If pus collections develop, incision through the vaginal vault or over localized areas above Poupart's ligament, is indicated, but even then we must remember that in the majority of such cases the suppurative foci are multiple and it may be advisable to puncture only those pockets easily reached without attempting to establish free drainage through the vaginal vault by breaking up dense adhesions or opening exudates.

Laparotomy is rarely ever indicated in para or perimetritis until some time has elapsed, and it becomes necessary to deal with adhesions, abscessed ovaries, or tubes. Even then Bumm strongly advises operating by vaginal route, even if in doing so the uterus is sacrificed. I do not think American surgeons agree with him on this point, however.

General purulent peritonitis is a comparatively rare complication in puerperal cases and practically all end fatally. The infection is usually streptococcic. In one of my cases the pathologist reported pure pneumococcal cultures and the patient recovered after free incision of the vaginal vault.

I believe I have saved three lives by timely incision of the vaginal vault and the institution of free drainage. All were desperate emergency cases and presented the most unfavorable conditions. I can positively state that the pus was not localized, for coils of intestines dropped through the incision while drainage was being

completed, and showed no evidence of adhesions. All three recovered and two have since borne children.

The mortality rate in acute diffuse peritonitis has been little, if any, improved, except in the clinics of some bold surgeons who have been able to show that if laparotomy and drainage is performed early many cases may be saved. Leopold insists that when the diagnosis of acute peritonitis is made, the abdomen is not to be opened later than three days after the onset. This rule has been applied to peritonitis originating from appendix, gall bladder perforation, etc., and has materially reduced the death rate. It is not too much to believe that the results in puerperal peritonitis may be improved, if the cases were operated upon at an earlier stage.

Bumm makes a small median incision, explores the pelvis, deals with pus tubes, ruptured uterus, or any distinct lesion, then makes counter incisions in both flanks through which tubes are drawn. Another opening is made through the vault. I have had two cases recover by this method and I believe that timely incision (preferably under oxygen and ether anesthesia), free drainage, with the least possible manipulation of the abdominal contents, and eliminating irrigation, may relieve more cases than our former methods saved. In mild cases of peritonitis (more chronic) Bumm and Leopold had a mortality of 50 and 23 per cent respectively.

There are still many details to be perfected before a proper study of the operative results in puerperal peritonitis can be made. The most important is the ability to differentiate the cases having a tendency to localize from those classed as foudroyant peritonitis that will only survive a few days despite any form of treatment. Bumm thinks that even some of these may be saved if laparotomized during the first 24 or 36 hours.

Time will not permit the free discussion of hysterectomy in acute puerperal processes. The variable lesions, the rapid invasion, the difficulty of diagnosis and the uncertain resisting powers of a given case, make hysterectomy a disappointing operation and prospects of further reducing the mortality are discouraging. Wormser studied 291 cases in which hysterectomy was performed and found that 69.4 per cent. of the cases operated upon for acute sepsis, died; after pelvic veins were involved, 68.1 per cent; in general peritonitis, 67.3 per cent, and for gangrenous myomata, 23.3 per cent. Such a mortality rate condemns hysterectomy, unless undertaken by an experienced surgeon for some special lesion, such as sloughing tumor, uterine abscess, ruptured uterus, etc.

If hysterectomy is performed sufficiently early to prevent extension of the process, many uteri would be removed unnecessarily, and if operation is delayed too long it is useless.

The surgical treatment of septic thrombophlebitis is at present receiving considerable attention, due chiefly to the efforts of Trendelenburg, Brumm, Latzko, Williams and others.

It is not possible to arrive at conclusions as to the efficacy of venous ligation as yet, as there have not been sufficient cases reported and because so many of the cases operated upon have been badly selected. Several valuable facts have been established, however, in regard to pyemia, which may be summed up in a few words:

(1) Septic thrombophlebitis occurs oftener than was formerly suspected.

(2) The mortality can be estimated to be not less than 70 per cent.

(3) In many cases the process has been arrested by ligation of the involved veins.

(4) In chronic cases the diagnosis can be made with a fair degree of certainty.

(5) In acute pyemia the mortality has not been influenced by operation.

All of these points are of practical value and an unbiased operator cannot but admit that ligation of septic thrombosed veins may be performed with favorable results in selected cases. All of the authorities who have had sufficient experience with the operation to be able to express an opinion of its merits, urge its performance as soon as a positive diagnosis can be made. I have performed the operation in one instance, a desperate case of chronic pyemia, with prompt recovery.

It will require a large number of cases and careful discrimination to establish the true merits of the surgical treatment of pyemia and if we are able to save only a few cases, it is worthy of consideration in a condition presenting at present such a frightful mortality.

Intravenous infusion of silver salts in bacteriemia has been disappointing. The latest investigations show that they act simply by increasing phagocytosis. I have abandoned such treatment, after a trial sufficient to convince me that it has little value and that it often precipitates severe chills and other aggravating symptoms.

Occasional favorable reports of the value of bichloride of mercury, given by infusion, appear in the literature. Stowe uses it in undoubted cases of septicemia and states that it seems to be beneficial, is harmless and is worthy of further trial.

The results of serum and vaccine treatment are equally disappointing, although some of our best authorities report good results from their use. Mixed infection occurs in such a

large percentage of the cases, and the many strains of streptococci present make the numerous preparation of an efficient serum exceedingly difficult.

Aside from the special surgical indications, the general remedial measures are important. Septic patients are, as a rule, overstimulated. Strychnine and digitalis may be indicated, but it must be remembered that their administration every few hours for many days may produce nervousness and disturb sleep—and rest is absolutely essential. Septic patients do not sleep well, especially when overstimulated. Sleep must be induced, even if repeated doses of morphine are necessary.

In chronic cases nothing is so beneficial as sunshine and outdoor life. As soon as possible the patient should be placed outdoors on cot or wheel-chair, governing the length of time by the condition of the patient.

While I have offered nothing new upon this subject, I have endeavored to emphasize some points that are not generally accepted but are insisted upon by most of our careful observers, *viz.*, the necessity of differentiating the types of infection by bacteriological examination; a clear knowledge of the lesions as revealed by the physical signs, a more conservative, non-surgical treatment of simple infection, the danger and uselessness of surgical interference in the presence of streptococcic infection, and the necessity of earlier interference when abdominal operations are indicated.

ABSTRACT OF DISCUSSION.

Dr. E. D. Martin, New Orleans, said that he believed Dr. Miller had been misunderstood; that he was discussing the surgical treatment of certain phases of puerperal infection and not sapraemia, which was a very different thing. He said that sapraemic conditions always manifested themselves within twenty-four to seventy-two hours, the onset was acute and usually violent, and in such cases he believed it was justifiable to explore the uterus with caution. In septic cases, however, conditions are very different and we are dealing with a more or less constitutional rather than local infection. He said he was delighted to hear Dr. Miller say that drugs were useless in such conditions and that no one believed whipping a horse under a heavy load would give him more strength, that on the contrary it only exhausted the little strength left. The heart is exactly in the same condition; it is laboring under a heavy load already and stimulating it more means to destroy the little reserve strength it has, which might, if let alone, carry it over the dangerous period. These cases need rest, not stimulation. What they need is to be put in the open, protected from the rain, fed on all kinds of nutritious food and given liquids, both by mouth and per rectum, with the Murphy drip, regardless of temperature. Most of these cases, he believes, die from over-treatment. His method of treatment, in a few words, is: Drainage, Fowler's position, fresh air, food, rest and the Murphy drip.

PUERPERAL STREPTOCOCAEMIA, WITH REPORT OF TWO CASES.*

BY

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It was an American, that versatile genius, poet, philosopher and most learned physician of his day, Dr. Oliver Wendell Holmes, to whom the world is indebted for the first ray of light upon the cause of a disease which at that time was producing such a fearful mortality, especially in the lying-in wards of the hospitals of the larger cities. Such was the dread of child-bed fever at this time, it is said, that many good women voluntarily denied themselves the pleasure of motherhood. When Holmes published his article in 1840, taking the position that puerperal fever was an infectious disease, his theory met with a storm of opposition and ridicule from the obstetricians of that period.

A like fate befell the young scientist Semmelweis of Vienna, when, in 1847, after observing and studying the immense amount of clinical material at the great maternity hospital in that city, published his discovery that puerperal fever was due to the absorption of septic material from the genital tract of the parturient woman. So bitterly were his views on this subject opposed by his colleagues and other writers of that period, that his brilliant but short career was soon ended in an insane asylum.

Since the advent of these two pioneers in this field, Lister, Mayerhofer, Pastuer and other investigators, have demonstrated and classified the numerous bacteria and micrococci found in the genital canal of the parturient woman. Yet a majority of obstetricians of today do not place reliance on the positive identification of the infecting bacteria. Halzbach says that bacteriology is not yet sufficiently advanced to give positive identification for clinical opinion. The vaginal flora of the human female is now being studied by a number of investigators to determine just what etiologic part is played by each species of microorganisms therein found. With all the light that has been thrown on this subject, we are still unable to make a differential diagnosis in the beginning of many of these cases. Mansfield of Berlin, is of the opinion that all the severe cases are due to streptococcic infection, and that the milder cases are due to a mixed infection, or to the presence of some other microorganism.

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My personal experience leads me to agree with Mansfield. I believe that only a very small proportion of the cases that we designate puerperal fever are due to streptococcic infection. In the past all fevers were classified in one group; within the memory of most of us all cases of dysentery were put in the same class and received the same remedial treatment. The same can be said of other pathologic conditions.

It is not my intention to treat of puerperal fever in general, but to limit myself to those cases in which the clinical history and microscopic findings show that they are due to a streptococaemia.

The symptom complex of a true case of puerperal streptococaemia presents a different picture from that in which the infection is due to an invasion of the contiguous parts by a mixed horde of micrococci and bacteria. As above stated, it is frequently impossible at the onset to determine what the infecting agent is. When due to streptococci the gravity of the case is soon apparent; without the demonstration of these germs a diagnosis cannot be arrived at with any degree of certainty. It is frequently the case that several specimens are examined before the suspected cocci are found, and diagnosis will have to be withheld until a blood culture, a smear from the vagina, and the clinical symptoms, settle the matter.

My personal experience convinces me that in no other form of septicaemia is there a wider variation in symptomatology. We have been taught to expect the initial chill and high fever within three to five days after labor, with profuse sweats, distended abdomen, foetid lochia. In my experience the cases presenting this picture are the exception instead of the rule. To better illustrate this point, I will hereafter submit two cases, which show a wide difference in clinical history.

Koenig found streptococci absent in the bacteriological flora of two hundred pregnant women, and it was his conclusion that the secretion from the anti-partum vagina rarely if ever contained these germs. He further believes that the normal vaginal secretion is antagonistic to them, and that they could not exist for any length of time in this media. To demonstrate the futility of the antiseptic vaginal douche, he showed that within one hour after a strong lysol solution had been used in a vagina where these cocci had been introduced they were found apparently uninjured or diminished by the douche. He also showed that when this douche had been administered, it required from 18 to 36 hours for the vaginal secretions to destroy the cocci, while without the douche they ceased to exist within from 11 to 20 hours. The experiments and observations of recent investigators very conclusively teach us that the vaginal secretions of the healthy woman are the best possible antiseptic, and that any kind of douche is not only useless but dangerous during the puerperium.

We are forced to the conclusion that the infection in all, or practically all, cases of puerperal sepsis, is exogenous, and that while autoinfection is possible, its occurrence is rare.

We are all familiar with the report recently submitted by the committee appointed by the American Medical Association to determine whether it is advisable in cases of suspected puerperal sepsis to empty the uterus of all retained matter. This committee was not unanimous in its findings, but a majority were of the opinion that non-interference with the genital tract was the only safe course in these cases and strongly condemned the curette and interuterine douche. De Lee, in his recent work on obstetrics, makes the statement that unless for the control of uterine hemorrhage, the obstetrician should never introduce his finger or any instrument into the womb when he believes that there is sepsis, even when there is reason to believe that decomposing portions of the placenta, membrane or blood clot, are present. He also strongly disapproves of the use of the curette, either blunt or sharp, in these cases, stating that it is a most dangerous procedure, for the reason that by so doing the protecting wall that nature has thrown up to limit the spread of the infection is destroyed, thus allowing a local infection to become general. He further recites the fact that a curettage would be useless for the reason that within fifteen minutes after inoculation the infection is out of reach of any instrument, and that it is just as reasonable to expect to cure a case of diphtheria by curetting the nose and throat. If the retained secundine is known to be present, and the woman has symptoms of sepsis, it is the safer course to risk a sapraemia or a local infection, than to take chances on introducing, or if already present allowing, a systemic infection through the wound of the delicate uterine mucosa caused by the attempt to remove this offending material.

From my experience I am convinced that the opinion here quoted is sound and correct, both in theory and practice. I should most certainly hesitate to introduce my finger, an instrument or a douche into the womb of a puerperal fever patient; at any rate, I would be quite sure before doing so that the case was the result of putrefactive rather than streptococci infection.

The two cases given below emphasize the salient points that I am attempting to bring out in this paper, namely, that streptococaemia is not a common disease; that when on repeated

bacteriologic examination streptococci are found in the blood, lochia or pus, but few, or a small percentage recover; that a case may persist for months and terminate in death, at no time during its course giving a history of chill, elevation of temperature above 103° F., or sweats.

The treatment of streptococaemia is as unsatisfactory as its early diagnosis. My experience with several cases recently, two of which a most careful clinical record was kept, including frequent blood examinations, forces me to believe that about all that can be done for the unfortunate patient is to treat her symptomatically, keep her in the fresh air and sunshine and give her both a nutritious and a liberal diet. When the patient is fast losing strength, pulse becoming more rapid and blood pressure dropping, normal salt solution by the Murphy drip method should be administered. If this and other means fail, I would advise direct venous transfusion, if a suitable donor can be procured. Much has been written upon the treatment of puerperal septicaemia by the administration of serums and bacterins; it is with regret that I state that these and all medicinal remedies have proven futile in my hands.

Case No. 1.—Mrs. B., white, age 27, while in good health was delivered of her fifth child on the 18th of April, 1912. Labor was normal, and the puerperium without incident until the third day, when a chill occurred, followed by a temperature of 103. Another chill and high temperature occurred on the following day, when her physician did a curettage, removing from the uterus about an ounce of pus and some membrane and then douching the uterus with a solution of bichloride of mercury. A more severe chill occurring during the next twenty-four hours, the curette and douche were again used, but nothing removed. On the 24th of April, I was asked to see the case with the attending physician. The patient presented rather a healthy appearance; temperature 104, pulse 100, blood pressure 130, cystolic; no pain, abdominal distension or tenderness; lochia free from odor, and digital examination of the pelvis revealed no evidence of inflammation or pus foci.

Specimen from the lochia was obtained, also 2 cc. of blood. Without waiting for the report of the bacteriologist, 20 cc. of antistreptococcic serum was administered, with 80 cc. more during the next twenty-four hours. The bacteriologist reported negative as to specimen of blood, but that in the smear from the os, staphylococci, pneumococci and colon bacilli were found. The patient continued to have severe chills, fevers and sweats. Mixed staphylo and strepto bacterins in large doses were administered without benefit. Three days later, streptococci pyogenes were demonstrated from a smear from the lochia; blood examination negative. One week later streptococci in pure culture were found in the blood.

Getting no results from the injection of the serums and bacterins, Collargol was given hypodermically for six days; but the patient continued to grow worse in spite of the numerous remedies used.

During the third and fourth week of her illness there occurred a most remarkable variation in temperature, a hyperexia of 107.5° and a hyporexia of 94°, a difference in temperature of 13.5° F. within a few hours. The periods of subnormal temperature would last from four to ten hours, when there would be a sudden rise of temperature, lasting about the same length of time, then a profuse diaphoresis for several hours, and then the cycle again. The nurse in attendance was entirely reliable, and her records were verified by the attending physician and myself.

This condition continued, but without the extreme variation mentioned above. At the end of three months a hepatic abscess developed. A few days later, a pleuro-pneumonia terminated this protracted case, on the 106th day after the initial chill.

Case No. 2.—Mrs. P., white, age 33, multipara, during a visit to a neighboring city, aborted on July 31, 1913. She stated that she was three months pregnant at the time. She was attended by a physician, who made no vaginal examination. She was able to return to her home in a few days, apparently well, but on the eighth day after the abortion she had a rather profuse hemorrhage. A physician was called and with a curette removed from the uterus some blood clots and decomposed matter. There was no further bleeding and no lochia. Three days later the temperature rose to 102.5° F. There was no chill nor sweat. There was a remittant fever from this time on, although the patient was not confined to her bed all the while. She suffered no pain and had a fair appetite. There being no lochial discharge or any other symptom indicating a puerperal infection, and upon obtaining a positive Widal, a diagnosis of typhoid fever was made and she was treated accordingly by her physician.

On the 27th of October, following, she came under my care. At that time there was a temperature of from 99.5° to 102° F., pulse 115 to 130, some nausea, a nocturnal diarrhoea, no abdominal distension or tenderness, liver and spleen normal in size and urine normal. As there was no indication of pelvic trouble, no vaginal examination was made at this time. From the clinical history obtained, I believed that the case was one of puerperal sepsis. She was at once sent to a hospital. A blood culture at this time showed no cocci present. Her condition improved for some weeks on a forced diet and fresh air and sunshine. Three weeks after her admission to the hospital, her urine was found to contain a large quantity of pus, in which were found, besides some colon bacilli, a large number of both streptococci and staphylococci. About this time the patient developed pain and tenderness in the region of the left kidney, and a painful and enlarged left inguinal gland. As soon as her condition would admit, a cystoscopic examination was made and normal urine drawn from both kidneys. A further cystoscopic inspection revealed an opening in the left posterior wall of the bladder, through which pus was entering. A vaginal examination now showed a small mass in the region of the left broad ligament. The next day, although the patient was apparently in extremis, with a pulse of 150 and blood pressure of less than 90, cystolic, ether was administered and the abscess drained through the roof of the vagina. Some slight improvement followed this procedure. with lower temperature and more comfort, which lasted for some days, although the pulse remained high.

As her condition again became exceedingly grave, it was decided to do a direct venous transfusion, her brother supplying the blood. When placed on the table the temperature of the patient was 101° F., cystolic; blood pressure 90, dyastolic about 75. The donor's pressure was 136. At the end of thirty minutes recipient's pulse was 130, with improvement in volume, cystolic pressure 114, while donor's pressure had dropped to 120. As the donor now com-

plained of dizziness and slight dyspnea, the operation was discontinued.

For several days the good effect of the transfusion was maintained, but the patient then steadily grew worse and died on the 26th of December.

This patient lived nearly five months after being infected. At no time was there a chill or profuse sweat. There was quite a regular morning remission and evening exacerbation of temperature, which seldom rose above 101° F. For sixty days prior to death she had a pulse rate of 120 to 140. An uncontrollable nocturnal diarrhoea characterized this case all during its course. No pus foci were formed until late. Streptococci were found in the specimens of pus examined. None were demonstrated in the blood.

PREVENTIVE GYNECOLOGY—THE BURDEN OF OBSTETRICS.*

BY

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Not in all the ages has mankind received from the realm of human thought and action a greater blessing than that which has come to it as a result of preventive medicine. Nor is it hardly probable that we will ever secure a greater or more valuable benefaction than will come of the universal application of preventive medicine to every phase of human suffering and physical dissolution.

We have been thinking of preventive medicine as applying only to communicable diseases, and the laity have come to consider that communicable diseases are the only kind that are preventable. This is an error. The term "preventable disease" has not been covering enough territory. I am convinced that communicable diseases are not more than half of the diseases that are really preventable. In gynecology we have a most striking example of the fact of this declaration. The statement made by some writers that fully 50 per cent of all gynecological diseases in women who have borne children are due to faulty obstetrics, is evidently seasoned with truth. Given a well-trained, well-equipped, careful obstetrician and a fairly well-informed woman, as to the pertinent issues of pre-confinement, child-bearing and maternity, and the gynecologist would be left with venereal diseases, tumors and tuberculosis, to handle. Social hygiene and public sanitation are conspiring to eradicate the first and the last of these conditions. Therefore, when a competent obstetrics and a broad and efficient public health and social hygiene policy, join hands in an effort to do their full duty to the mothers of our fair land, it is not a difficult matter to forecast the future of the gynecological industry. It may be argued that this is an ideal condition and that ideals are never attained. I might reply that no great thing has ever been achieved without an ideal.

If a master artist, my prize creation would be that of a mother saved to a healthy existence and a happy world by an honest, careful and intelligent obstetrician. As a companion to this picture, and in striking contrast to it, I would paint another scene, a mother lost to a healthy, happy existence as the result of a careless or ignorant obstetrician. How many dark scenes like this prevail in Texas homes today, that would have been cheerful firesides except for the ignorance or neglect of somebody? The question as to which of these scenes the obstetrician is going to leave in the home after his work is done, should come to him in thunderous tones.

It is exceedingly unfortunate that we have been subscribing to the proposition that the practice of obstetrics is of no serious consequence, and requires no particular fitness, except sense enough to not unduly meddle and to be fairly clean. Many of us have so consoled ourselves. When this question is viewed from the correct angle, it cannot be denied that upon the obstetrician is the burden of preventive gynecology, hence we can surely agree that he should be of good scientific training, striving at all times to get the best methods into his practice, at all times conscious of his responsibility, careful in detail, of good judgment and above all, of energy and action. The physician should expect to measure up to a reasonable standard of efficiency and progress in this field or be honest enough to refuse any obstetric work at all.

This standard is important. It is rather unfortunate that those in authority in affairs of medical education, do not allow more time for the teaching of physical diagnosis and the fundamentals of obstetrics. The average student is not drilled and grounded in these things as he is in serums, or operative technique, for instance. Worst of all, the actual, practical, clinical teaching is very much neglected. How can we expect efficiency to come from a condition of this sort, except at the expense of innocent mothers? The school of actual experience, with a few sad mistakes, is usually where we get our training. The German idea that the doctor shall have clinical training, under experienced leaders, before being permitted to engage in any line of medical practice would be a real benefaction if it could permeate American medicine. Again, when we get to be "sure enough" doctors in general practice, we are accustomed to reading, thinking, talking and writ-

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ing about every conceivable thing in medicine except the practical issues of obstetrics. We are very anxious to get the very newest things in serum therapy, in clinical diagnosis, in surgical technique, etc., and a very small amount of interest is taken in the newer and better methods of obstetric diagnosis and technique. When our post-graduate course is planned, advanced work or even a review in obstetrics, is usually omitted; but we are glad to see everything in the line of gynecological technique.

In this discussion the term gynecology is meant to include other than simply surgical conditions. There are many cases today of puerperal insanity, the various neuroses, renal affections, etc., that are directly traceable to pathological conditions arising in the pre-confinement period or to sepsis in the puerperium, that could have been prevented. This means that every prospective case should have a careful and complete physical examination in the early days of conception, especially as to heart, blood, blood pressure, the latter to be repeated at regular intervals, urinalysis, this also to be repeated, lungs, nervous system, digestive system and pelvic measurements. Too frequently we are contented, when such a case is placed in our hands, if the financial arrangement is satisfactory, and give it no further thought, dismissing the prospective father or mother with the request that they call us when the case is ready for delivery, in many instances without asking a single question as to her previous labors, her general physical condition, or requesting a urinalysis and blood pressure reading, with a general physical examination. It is as much the duty of the obstetrician to carefully go over his patient as it is that the surgeon should do the same in a laparotomy. In this way, and this way only, can we discover unfavorable conditions and correct them before a permanent injury is done. With the valuable evidence furnished by blood pressure records there is no excuse for so much eclampsia as occurs today. How many of us insist on seeing our patients and, after the necessary examinations, explain to the prospective mother what she must do and must not do that she may be in the best possible condition for delivery and the puerperium?

We know that to make effective any policy of prevention we must have an enlightened public. We have been drilling the people about flies, sewage disposal, drainage, quarantine, protection of food, etc., but how much have we taught the prospective mother about the tremendously important events soon to follow in her life? No guide-posts have been put up, no kindly light is leading. Every opportunity should be taken to educate women relative to the things they should know about pregnancy, child-bearing and the puerperium. Particularly should they be taught the necessity of calling a physician as soon as pregnancy is known to exist. They should also be taught that it is necessary for the doctor to go into the case thoroughly and give such instructions and look after the case in such a way as to insure a safe course. They should be taught the value of correct living generally, diet, exercise and the care of kidneys and the bowels. The doctor should give this instruction personally and not rely upon books and magazine articles, for so many do not know how to interpret what they read of a scientific nature and hence such articles may be misleading. Women are great talkers and whenever the doctors of a community begin to insist upon this early examination and information, always explaining why it is necessary, it becomes a very effective means of instruction.

The whole process of labor is thoroughly physiological. It is the first duty of the physician not to interfere with anything that is frankly physiological. A due regard for this principle is of prime importance in the practice of obstetrics. Better encourage physiological activities than to attempt to assume control. If the mother has been kept in good bodily condition, if her pelvis and her tissues are normal, if the child is normal, and the labor properly conducted, she should in every instance be a perfectly well woman following this ordeal. The actual period of labor is the real crux for action, so far as prevention goes. Here it is that the grace to wait, cool, deliberate judgment, and skill in procedures of interference, count for everything in the welfare of the patient. One essential of the greatest importance is the careful and skillful use of forceps, which are like a great many of our best agencies, liable to become a great evil to the woman in labor. There is a degree of fact in the statement that Cæsarian section in the hands of a good surgeon is safer for the woman than a forceps delivery in the hands of the incompetent. Therefore, it is as necessary to know that forceps are required as it is to be certain that Cæsarian section is demanded, and as necessary to be skilled in the one as the other.

As to the actual conduct of labor this paper will not deal. There are three sequellae of the gravest importance that might follow any labor, about which too much cannot be said, namely, mechanical tears, infection and exhaustion, with their evil consequences, all of which are practically under the control of the obstetrician. He can in a great majority of cases prevent tears, or at any rate obviate evil results by immediate repair. I quite agree with one of my colleagues that puerperal sepsis is a crime. When we consider the gravity of infection, with

its fearful and devastating consequences, we must all agree with him, particularly in the face of the fact that infection can be prevented. Quite a lot of sepsis would vanish if the white-winged dove of practical consistency would hover over the birth chamber. Our ideas as to asepsis in obstetrics are quite good, but there is a just criticism to the act of scrubbing and disinfecting our hands and the vulva perhaps, overlooking dirty thighs, dirty bed linen, etc.

Here is the greatest of occasions for the employment of mental therapy and the prevention or lessening of exhaustion, especially of the nervous system. Labor is oft times an overwhelming experience to the woman, the primipara especially. A good many women have passed through this experience in a horrified manner, with no mental support and without any physical injury, only to remain exhausted for a long time, even for life. This condition is more apt to be found, of course, associating with sepsis or tears, and is often one of the most serious consequences of these things.

Not the least factor in preventive gynecology, is the protection of innocent women against the commercial manipulations of the gynecological promoters. When the doctor is not sure of his diagnosis a suggestion as to the probability of some existing pathological condition, for which a surgical procedure is usually required, should be as carefully steered away from as a hornet's nest. Unwarranted suggestions by the doctor have caused many a woman to go to the operating table who would have been better off at home. But her doctor, without going into her case carefully and telling her the truth, or perhaps he does not know, and does not call in some one who is equipped in diagnostic ability, and being in a hurry to get that next call, tells her she probably has a bad ovary; then the only thing that will relieve her, particularly her peace of mind, is that the ovary shall come out. Her friend had a diseased ovary and it came out, which is the only criterion for action under these circumstances. Again, some are so unfortunate as to acquire imaginary troubles because their symptoms are similar to those of a neighbor across the fence, who perhaps actually had a bad ovary and had it removed. It is the doctor's plain duty to protect such patients and keep them out of the hands of unskilled and conscienceless surgeons, who operate for money.

Cancer of the uterus and breast, should be matters of eternal vigilance on the part of the general practitioner, who is the one to see these cases first, as a rule. To let one of these cases progress uncared for and without warning until the time comes when the victim is doomed and without hope, is about as criminal a procedure as puerperal sepsis.

PROLAPSE OF THE UTERUS.*

BY

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Prolapse of the uterus is a hernia of the pelvic outlet in which the uterus and the bladder are the principal organs contained in the sack. Like an inguinal hernia it may be from a congenital defect; but most of the cases by far are caused by acquired pathological lesions. There are three stages of prolapse. The first is where the uterus descends until the body rests in the hollow of the sacrum, when we have a retroversion. The second is where the uterus has descended until the cervix appears at the vaginal outlet. The third is where the uterus wholly or partially extends through the vulva, pulling with it the bladder and anterior and posterior walls.

The cause of prolapse is from pressure from above, such as the intra-abdominal pressure, large tumors, ascites, tight lacing and heavy clothes supported from the waist. The axis of the uterus is at right angles, or, more strictly speaking, acute angles to the outlet of the pelvis. If the relationship of the above angles is properly maintained the pressure from above would have a tendency to prevent prolapse. But when the axis of the uterus is interfered with by relaxation of its supports, then the intra-abdominal pressure hastens the descent. The round ligaments prevent the body of the uterus from falling back and the utero-sacral ligaments hold the cervix back in the hollow of the sacrum. Thus if these two supports of the uterus relax, the body falls back on the sacrum, the cervix advances forward and the axis of the uterus is in direct line with the axis of the outlet of the pelvis. Pressure from above and a heavy subinvoluted or fibroid uterus, force the organs further down. If the perineum is lacerated or strictly speaking, if the levator ani muscle is torn, there is no support below and the uterus descends, dragging with it the anterior vaginal wall, the bladder and the posterior vaginal wall.

The principal symptoms of prolapse are backache, drawing sensation in the back of the head and neck, dragging pains in pelvis extending down the legs, a feeling when standing on the feet that everything would drop out, obstinate constipation on account of patient having no force to empty the rectum, tenesmus due to decomposed retained urine, because the bladder never can empty itself, and various nervous symptoms.

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The first and most important treatment of prolapsus is prophylaxis. I wish to lay special stress on this. Medicine has made more advance in the past thirty years than from the creation of the world up to that time. We attempted to find specific cures at first and succeeded in a few instances, but not enough to be enthusiastic over it. Then thought was directed particularly to prevention of disease, and it is in this line that most good has been done. We are going through the same procedure in surgery. A wide variety of surgical appliances and many difficult and mechanically perfect operations, are being devised for the correction of surgical pathology, and along this line we are fast approaching the climax; soon we will stop and consider and pay more attention to preventive surgery. In our anxiety to invent new cures we have forgotten to preach preventive surgery. I am fast coming to the belief that an abdomen that never needed to be opened is better than one that has had the most successful operation. So the more we can prevent, the better off our patients are. I believe that 90 per cent of prolapses could be prevented. We should instruct the public on the evils of tight lacing, of heavy clothes hung from the waist and of high-heel shoes. We should teach women how to take care of themselves during the menstrual period. The obstetrician should demand of his patients the opportunity to give them more attention before, during and after confinement. Every physician should be as careful in disinfecting himself and the patient in confinement, as he would in going into an abdomen. Many low-grade infections have arisen from this cause. In the beginning the patient may not be very sick, but in the long run she may have to pay the penalty of invalidism and undergo serious surgical operations. The perineum of a freshly delivered woman should be examined by inspection for lacerations and if needed be repaired immediately. No tight abdominal binder should be worn while in bed, as that often forces the uterus backwards. Such a patient should stay in bed two or three weeks and take care of herself for another four weeks. She should be examined then to see if the uterus has undergone its normal involution and is in proper position. If such is not the case, local treatment and internal medication will correct the majority of them. If this routine were scrupulously carried out, I believe that nine out of ten prolapse cases would be prevented.

When the prolapse has become chronic the earlier operation is resorted to the better. A prolapse of the first grade is easier cured mechanically and from the patient's standpoint, than of the second. A prolapse of the second grade is easier cured than one of the third grade. Local treatments and pessaries serve only to pacify and deceive the patient, while her health and the disease are gradually growing worse; consequently they should rarely ever be tolerated. The operations best suited to the first grade cases are, curettment, repair or amputation of the cervix, as the case may be, in order to reduce the size of the uterus and repair the perineum. Then go in above and shorten the round ligaments, according to Gillian, Ferguson, Baldy or Mayo technique, or in some cases a suspension according to a modified Kelly operation. I have tried them all in a number of cases and think any of them will give from 90 to 95 per cent. of permanent cures, and on the whole one is about as efficient as the other, except the suspension. I do the latter only in cases where the others are impractical and have never seen any bad results from it. I have had two cases in which the shortening of the ligaments failed to hold and afterwards I did a modified Kelly suspension. Both patients, who had never conceived before, bore children subsequently without any difficulty, and four and six months afterwards the uterus was in normal position in each case.

In prolapse of the second degree, where children are desired, the above operations are indicated, but after childbirth there is a large percentage of recurrence. Where children are not desirable or advisable, we have the choice of two methods, a Martin's of Berlin, or a vaginal hysterectomy. Martin's operations are as follows:

A curettment and amputation of the cervix up to within one-half inch of the internal os, in order to bring down the size of the uterus; then dissect the bladder from the anterior vaginal wall and uterus, and push it up into the abdomen. If the bladder is saculated, pursestring its base, bring the uterus down under the bladder, resect a portion of the tubes or remove the ovaries to prevent conception and sew the uterus from the fundus to the internal os, to the anterior vaginal wall. Then do a perineorrhaphy. These operations are very effective, and the idea is that by curettment and amputation of the cervix the weight of the organ is reduced and by fixing the body to the anterior vaginal wall the axis of the uterus is at a very acute angle with the axis of the pelvic outlet and hence, cannot prolapse. Furthermore, the uterus being under the bladder prevents it from prolapsing.

The second method is a hysterectomy with sutures, and it is the method I employ more frequently than any other. Unless this method is properly done or done with clamps, we will have a worse prolapse afterwards than before. In fact, I do not think clamp operations should

ever be done. The ligature operation gives a high percentage of permanent cures.

The operation is performed as follows: The cervix is seized with volsellum forceps and an incision is made around the cervix at the junction of the bladder anteriorly and the cul-de-sac posteriorally. The bladder is dissected off the uterus both anteriorly and laterally, and pushed up into the abdomen; then open up anteriorly into the peritoneum; now open up into the cul-de-sac and free the uterus around to the broad ligaments on either side; with Kocher's artery forceps clamp about two inches of the broad ligament on both sides, near the uterus, and cut between; with a full curved, round-pointed needle, threaded with a No. 2 plain iodonized cat-gut, ligate the segments of the broad ligaments up to the tip of the forceps, leaving the threads long. Proceed likewise on up the uterus, pulling down as you proceed. In the last ligature take special pains to get the round ligaments. The peritoneum is sewed together, the round ligaments are sewed to the vaginal wall, the broad ligaments are tied together with the sutures that were left long and the vagina is closed further by being sewed to the broad ligaments. Then a perineorrhaphy completes the operation.

In prolapsus of the third degree this operation will give good results in the great majority of cases. In extreme cases of the third degree, it probably would be better to do a Murphy or Kocher operation, where the body of the uterus is fixed into the fascia of the abdominal incision. These methods are also indicated where one has to go into the abdomen for other conditions than prolapse.

PLACENTA PRAEVIA AND ITS TREATMENT.*

BY

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Perhaps I should offer an apology for my subject; but there is no more important obstetrical condition with which we have to contend. The fact that it so often comes up for discussion at medical meetings bears me out in this statement, as does the doubt existing in the minds of obstetricians as to the correct treatment.

By placenta praevia is meant the attachment of the placenta to the lower uterine segment. Writers as early as 1609 recognized the condition but explained it as an accidental prolapse. In 1789 Rigsby defined placenta praevia as an attachment of the placenta to that part of the womb which always dilates as labor advances, which definition is strictly accurate. It was he, too, who advanced the term "unavoidable hemorrhage" to discriminate from accidental hemorrhage due to premature separation of a normally situated placenta. After this very little advance was made in our knowledge concerning the condition until the views of Barnes were promulgated, as to the mode of production and the method of controlling the hemorrhage arising therefrom.

As to frequency, it has occurred once in every 125 labors in my own practice, but the most accurately compiled statistics give the condition at about one in every 1,200 labors; however, this varies at different times and in different localities. I feel safe in asserting that the condition is much more common than reports would indicate.

Very little is definitely known as to the etiology of placenta praevia, but endometritis and multiparity seem to favor its occurrence.

The most satisfactory classification is, placenta praevia centralis, lateralis and marginalis, the central type being met with rarely.

The characteristic symptom, as is well known, is hemorrhage, which does not usually appear until after the seventh month of pregnancy, although we may have well-defined symptoms much earlier. The bleeding usually recurs in increasing amounts and at decreasing intervals, as pregnancy advances.

It is a recognized fact that no single method of treatment is applicable to all cases of placenta praevia. The period of gestation when the case comes to the attention of the obstetrician, whether in labor or not; condition of the cervix, dilated or dilatable; clinical variety; amount of blood the patient has lost, and even other conditions, must guide the attendant in selecting the method of treatment. Of course, the first question of importance in deciding on any method of treatment is the maternal mortality, that of the child being secondary.

Because of the danger of profuse and unexpected hemorrhage, pregnancy or labor, as the case may be, should be terminated in the most conservative manner as early as possible after the diagnosis has been made.

The management should be according to the principles of one of the following recognized methods, the details of which will vary with different operators: In all cases first send for an assistant to administer an anesthetic. Prepare the patient and yourself as for any major surgical operation, always using sterile rubber gloves. The cervix should be dilated by means of the finger or a Goodell dilater until sufficiently open to admit two fingers. A sterile dilatable rubber bag should be introduced, first rupturing the membranes or making a rent in

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the placenta, if you have to deal with a central insertion. The bag when dilated will act as a tampon and control the hemorrhage, thereby giving time for gradual dilatation, and will enable a delivery to be effected in the majority of cases by the use of forceps or otherwise, with a small amount of hemorrhage and little injury to the maternal soft parts. This method, in the hands of many of the foremost obstetricians, gives the lowest death rate to both mother and child; but from the standpoint of the general practitioner this method is not practicable, as few in private practice are equipped with a balloon and the paraphernalia necessary for its introduction.

If the child is not viable and the cervix is rigid, equally good maternal results may be obtained by the use of a tight cervical and vaginal pack of sterile or iodoform gauze. This will control the hemorrhage and in a few hours will bring about sufficient dilatation to permit the employment of whatever maneuver may be deemed necessary. The use of the pack, however, is attended with the danger of infection and may give rise to a false sense of security. The operator should always bear in mind that rapid manual or instrumental dilatation is certain to be more or less hazardous to both mother and child.

My own belief is that when the mother is in good condition and it is certain that the child is viable, and that its condition has not been compromised by serious bleeding, the preferable method of treatment is to do complete manual dilatation as rapidly as is safe. While this is being done firm but gentle pressure should be made upon the fundus of the uterus to keep the head well down against the lower segment, that it may act as a tampon. While these manipulations are being carried on, 1 cc. of pituitrin may be administered hypodermically to stimulate or increase uterine contractions. Follow with bi-polar version and extraction, or if the head is well down forceps can be applied and a delivery effected in that way. This method somewhat increases the risk to the mother, but the child's chances are so much improved that it is proper to increase the maternal risk to some extent for the sake of a living child. Whichever method is employed, extraction should not be attempted until the cervix is completely dilated, or at least sufficiently so to permit the passage of the head.

After the child has been extracted great care must be exercised in the management of the third stage. If there is no hemorrhage the removal of the placenta may be left alone until it is expelled into the vagina, but when the bleeding is profuse, Crede's method should be resorted to at once. If this is not effective the placenta should be removed manually. In a large percentage of cases the continued oozing from the uterus will necessitate the introduction of sterile gauze into the uterus and a vaginal tampon.

POST-OPERATIVE HEMORRHAGE OF THE FALLOPIAN TUBES.*

BY

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My observation of this condition will not enable me to say whether it is rare or whether it is misdiagnosed and of fairly frequent occurrence. There is surprisingly little in the literature; no mention is made of traumatic hemorrhage of the tubes, and trauma is, I believe, the fundamental etiologic factor. I am convinced that the condition is frequently met with and diagnosed as a disturbance of menstruation, and treated as such. The symptoms, in the beginning and at various stages, are not unlike those of ectopic gestation; there is sharp pain intermittently in the pelvis, accompanied by periodical discharge of blood from the uterus, sometimes accompanied by nausea and general depression, frequently tenderness over the lower iliac region, and slight elevation of temperature. Generally a pelvic examination will enable us to exclude ectopic gestation. In only one of the cases I have examined was there any appreciable enlargement of the tube; but there is always some rigidity of the broad ligament on the affected side. The following cases will illustrate:

Case 1.—White, age 30. Admitted to the hospital with a diagnosis of prolapsus and rectocele. Family and personal history, negative. One child 4 years old, normal labor. Menstrual history, normal until the past year, when the flow became excessive with lengthened time. Broad ligament suspension operation, curettage and repair perineum, was done, with reaction good. On the third post-operative day the patient began to menstruate rather freely, soiling five or six napkins per day. This continued for four days, with bright red blood, then gradually lessened in amount until only a napkin a day was soiled. This continued for two weeks.

Blood examination: Hemoglobin, 80; red blood corpuscles, 3,230,000, no pathologic variations; leucocytes, 7,200; polys., 68%; mons., 23%; basophiles, 8%; eosinophiles, 1%.

Patient was tamponed with dry lamb's wool, and was found soiled to the extent of a teaspoonful each night on removing the tampon. There was at no time any pelvic pain. By vaginal examination some rigidity of the right broad ligament was detected, with some tenderness; right tube not appreciably enlarged; no mass distinguished. The patient was sent to her home in the country, where she remained for two months, with no cessation of the trouble. She returned because of backache, head-

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ache and a feeling, as she expressed it, of being "all worn out." Vaginal examination showed marked rigidity of the right broad ligament, extreme tenderness, no mass. She was now soiling two napkins per day. Blood showed hemoglobin, 70%; red blood corpuscles, 3,500,000; whites, 8,100. Exploratory operation was advised and adopted. Mid-line incision was made. The uterus was found to be in good position. No adhesions. The right tube at the junction of the inner and middle-third contained a small, soft, tumor-like mass about the size of an olive. The tube was excised and opened. The mucous surface everywhere resembled a beginning acute inflammation, and contained a broken-down haematoma with bright red blood. Culture made on sugar, free hydrolcycle-agar was negative. The blood could easily have come from the immediate trauma in removing the tube, but after its removal there was complete cessation of the flow for a period of two months, as long as the patient was under observation. I operated this case in the beginning, and remember distinctly to have clamped the tube and used it as a tractor for the uterus.

Case 2.—White, age 35. Married 16 years. Family and personal history, negative. One child 8 years old, labor long, instrumental delivery. Menstruation previous to pregnancy normal, 28-day type, three-day duration. Eighteen months ago patient was operated for prolapse and the right ovary resected. She does not remember whether there was a marked flow during her post-operative stay in the hospital, but says when she was just out of bed there was sufficient menstrual flow to soil two and three napkins a day. This flow was accompanied by sharp pains in the pelvis and occasional nausea, which she attributed to the operation. This flow gradually became less in amount, until she began to do her housework; the flow then increased in proportion to the amount of work she did. The entire lower abdomen became tender and painful, and she was unable to wear a corset. She allowed this to go on without attention for six months. At the time I saw her she was soiling six or eight napkins per day, with bright red blood.

Examination showed rigidity of the right broad ligament, with marked tenderness; a small mass was detected in the ligament; uterus was normal in size and position. Patient was pale and sallow, and rather poorly nourished. Blood examination showed, hemoglobin, 66%; red blood cells, 2,800,000; whites, 8,200. There was a soft, blowing systolic murmur over the apex, not transmitted. Genito-urinary system normal. Because of the length of time ectopic pregnancy was ruled out. Vaginal examination eliminated myoma and fibroid. The patient was put to bed, with an ice bag over the lower abdomen. Chloride of iron and ergot were given. At the end of one week the flow had reduced to a faint stain on the napkin; but immediately upon getting up and around the flow started again. After another week in bed I advised laparotomy. The abdomen was opened with a mid-line incision. The uterus was found to be in good position. A coil of the small intestine was adherent in the pelvis. A fibroid mass in the broad ligament about the size of a hickory nut shelled out easily; it was not connected with the tube or uterus. The right tube was extremely large and congested, resembling in the gross a beginning pyo-salpinx, fimbriated and free. The tube was removed without clamping. The mucous surface was extremely congested, and it contained bright red blood. Recovery was good. She was in the hospital two weeks. It is now four months since the operation and she has menstruated twice normally, with no intermediate flow.

Case 3.—White, age 26. Married; nulipara; family and personal history, negative. Menstrual history, irregular, 24 to 28-day type, flow at times excessive, at times scanty, always accompanied by considerable pain. Was operated in October, 1909, for chronic appendicitis, with request that her ovaries be examined. Recovery was good, the patient leaving the hospital on the tenth day. On the fourth post-operative day the patient began to menstruate, although she was just over the normal menstrual period. The flow continued active until the ninth post-operative day, then stopped. One week after leaving the hospital, on the sixteenth post-operative day, I saw her and she said she had been menstruating since she came home and was having considerable paroxysmal pain in the pelvis at intervals, accompanied with nausea, headache and general depression. Vaginal examination revealed only a slight tenderness in the right broad ligament. I advised rest in bed and gave ergot, iron and strychnine. At the end of four days the flow had entirely stopped. About two weeks later I saw the patient again. She was complaining of severe pain in the right side, nausea, vomiting and backache. Menstrual flow was well established, more than one would expect to find with an ectopic differential count. Whites, 7,600; polys., 74; small monos., 20.

Vaginal examination showed rigidity and tenderness in the right broad ligament; no mass detectable. With rest, ice bag and bromides the pain and flow continued intermittently for 48 hours. Operation was advised and done as an emergency, because of a tentative diagnosis of ectopic pregnancy. The usual mid-line incision was made. Pelvic contents were normal except for a congested and enlarged right tube, which was examined. It contained bright red blood. The patient made a good recovery, with no further disturbance of her menstrual functions at the end of six months. Culture made from the tube on hydrocele and meat infusion-agar was negative.

Whether this is a condition entirely post-operative, and due to trauma, I do not know, but we can readily see how a very slight trauma to a tube could cause extravasation of blood, the vessels being thin walled, of large size and arranged in a network, and having no support save the endothelial lining of the tube. Granted we have the extravasation, why does not coagulation occur, and give rise to a perfect haematoma? There are possibly two factors that prevent coagulation. One is that autogenous-serum has the power of producing migration of blood cells through the vessel wall. It cannot be determined whether the endothelial cells of the vessel are acted upon directly by the serum, causing them to lose their cohesive power, or whether there is a special ferment created for the proteid material of the serum, and the production of this ferment causes the endothelial cells to lose their specific characteristics.

Guinea-pig serum injected into a loop of small intestine of the pig, held over a glass rod not tight enough to produce hyperemia, did produce, in one-half hour, while the pig was still anesthetized, extravasation of blood into the lumen of the gut, with numerous echemotic spots under the mucus surface. This experi-

ment produced uniform results in a number of pigs.

It is a known fact that a collection of blood in any hollow viscera, or in any tissue of the body, undergoes autolysis. The first step in this process is a separation of the inorganic from the organic elements of the blood; a separation of the coloring matter from the plasma. Since autogenous serum will produce extravasation of blood in the guinea pig, it will likely have the same effect in the human.

Microscopic section of the tubes in cases reported, showed a uniform picture. The columnar epithelium, in many places, had lost its characteristics; absence of cilia; nuclei assuming cuboidal shape and becoming markedly swollen, and in many places there were areas on the folds in the tubes devoid of epithelium. The endothelium of the walls was swollen, with disappearance of many nuclei, and there was no evidence of any inflammatory change, round cell infiltration, etc. While I have given the cause of this condition as traumatism, I think it quite possible that the real cause is some secondary disturbance in the intricate physiologic action—post operative and perhaps associated with trauma, and I am still confused in attempting to account for the flow of such quantities of blood. It must come from the endometrium, and the question to be answered is: What produces this endometric activity? Unfortunately, the condition of the endometrium has not been even partially studied in these cases.

THE MEDICAL ASPECT OF INTESTINAL TOXEMIA.*

BY

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We understand intestinal toxemia to mean the formation within and absorption from the intestinal canal of known or unknown poisons, which, circulating in the blood, poison different tissues of the body and give rise to clinical symptoms.

This condition was first investigated in a scientific manner and brought before the public by Bouchard. Von Jacksch, Albu and Strauss in Germany, Charrin and Widal in France, and Combe of Switzerland, followed with valuable work along these lines. Metchnikoff with his theory that intestinal toxemia is the cause of old age, gave wide publicity to the subject, both to the profession and to the laity. More recently Lane by his short circuiting operation and Cannon, Hertz, Jordan, Quimby, Case, Carman, Cole and numerous other roentgenologists, by their studies of the gastro-intestinal tract have brought the subject more forcibly and understandingly before the profession. The general practitioner, the surgeon and the specialists, find it to be the cause of many of the diseases they are called on to treat.

So numerous are the diseases produced by intestinal toxemia that I know of no other disease or condition that should command as much attention from the medical profession.

Of the general causes of intestinal toxemia I will discuss only intestinal stasis. Such toxemias as those arising from diseases of the mouth and naso-pharynx, the functional and organic dyspepsias, infections by intestinal parasites, etc., not coming within the scope of this paper.

In the normal individual food remains in the stomach from three to six hours, which is long enough to become properly chymerfied. During this time it is passing into the intestine, a little at a time, as the pylorous relaxes. It passes through the small intestine in a liquid state, rather rapidly, and it is here that the principal absorption takes place. It reaches the caecum and ascending colon still in a liquid state, and is churned back and forth until nearly all of the remaining liquid and nourishment is absorbed. When it reaches the transverse colon it has become semi-solid and in this condition passes through the transverse and descending colon, accumulates in the descending colon until it stimulates peristalysis strong enough to cause it to pass the sigmoid and be evacuated. The normal time for passage of food through the entire canal is from 24 to 36 hours.

With the first mouthful of food the infant takes, the alimentatry tract becomes infected with bacteria of numerous varieties, and as the canal is an ideal incubator, furnishing heat, moisture and food, the bacteria thrive and throughout the remainder of life countless numbers of micro-organisms are harbored, it being estimated that over one-hundred billion bacteria are passed in the daily stool. The character of the bacteria depends in a great measure on the kind of food remnants on which they feed, the putrefactive bacteria predominating when there is an excess of protein remnants.

Owing to the antiseptic action of the hydrochloric acid of the gastric juice and the inhibiting action of the bile and succus intericus, together with the rapidity of the movement of the ingesta, only comparatively few bacteria are found in the stomach and small intestines. In the colon, where the movements are slow and the antiseptic and inhibiting action of the secretions have been lost, the bacteria find conditions suitable to their growth. Acting on the food remnants they break them up into simpler

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compounds, some of which are toxic, and at the same time themselves generate and throw off toxins.

It is inconceivable that even in the healthiest individual some of these toxins are not absorbed. Combe[1] has shown that deleterious effects from these poisons are prevented in the healthy individual by three barriers. First, the mucous membrane of the intestines by its secretions precipitates some of the poisons, rendering them unabsorbable, and the cells of the mucosa while absorbing the toxins transform them into living and useful albumins; second, the liver cells withdraw from the portal circulation toxins which have passed the first line of defense and so alter them as to deliver to the blood substances that are but slightly toxic (the liver destroys two-thirds of the poisons of digestive origin); third, the antitoxic glands—the suprarenals, the pituitary body and thyroid, secrete into the circulation oxidizing ferments or reducing agents, the antitoxic action of which is apparent.

In addition to these three barriers to the toxins, the organs of excretion, the respiratory tract, the salivary and sudoriferous glands, and the kidneys, extract from the circulation and excrete large quantities of poisons.

It is seen, therefore, that even though toxins are formed in relatively large amounts in the intestinal canal of healthy people, nature has made ample provision for their destruction or elimination so that little if any damage is done.

Anything that increases the formation and absorption of toxins beyond the limit of the neutralizing and destructive power of the different organs mentioned, allows the toxins to circulate through the body poisoning all the tissues and especially affecting those organs that have to do with their destruction and elimination.

Stasis in any portion of the intestinal canal, but more especially in those portions where the contents are fluid, causes a rapid increase in the numbers of the bacteria, with marked increase in the formation of poisons. Stasis also irritates the mucosa, thereby promoting absorption and interfering with its toxicolytic power.

Intestinal stasis is frequent and is the most common cause of intestinal toxemia. The most frequent causes of stasis are, atony, visceroptosis, "evolutionary" bands, membranes, adhesions and kinks, extra and intramural tumors, enlarged and hardened Houston's valves, hemorrhoids, fissures and spasm of the sphincter.

In atony, heredity seems to play an important part, several generations of the same family usually suffering from this condition. It is questionable, though, if the family habits do not play their part early enough in some of these cases to give them the appearance of being congenital. Improper eating in all its forms, neglecting to go to stool regularly, occupation, laziness, sedentary life, nervous diseases, diseases of an exhausting nature, and the drug and enema habit, are the most frequent causes of atony.

Visceroptosis, another of the most frequent causes, is nearly always associated with atony; in fact, it is often hard to separate these two conditions or to tell which is the primary affection. Visceroptosis is congenital in more than 50 per cent of the cases. The viscera lie lower in the abdominal cavity than normally, producing more acute angulations in the different curves of the intestines. For a period of time the intestines surmount the difficulties placed upon them by this position, and carry on their functions with little or no inconvenience or distress to the individual. Finally, through neglect, abuse, disease, etc., there is a further dropping, more acute angles are formed, making the passage of the ingesta more difficult, the musculature of the intestinal wall gives way and becomes atonic and stasis with its concomitant symptoms is the result.

The viscera are normally held in place by their ligamentous attachments, by adjustment to contiguous structures, by intra-abdominal pressure and by the position of poise described by Goldthwaite. Conditions that interfere with these normal supports may bring about acquired visceroptosis and increase a congenital ptosis; such conditions are habits of walking, sitting, standing, working, dressing, over-eating and drinking, sedentary life, malnutrition, chronic and exhausting diseases, extreme fatigue, frequent pregnancies and operations.

The "evolutionary" bands and membranes most frequently occur at the pylorus, at the juncture of the second and third portion of the duodenum, at the juncture of the duodenum and jejunum, on the ilium near the illiocecal valve (Lane's kink,) on the caecum and ascending colon, (Jackson's membrane, Jonnesco's fold,) at both the hepatic and splenic flexures and at the sigmoid. Other bands or folds may occur at any portion of the intestinal tract, causing mechanical obstruction or lessening peristalic activity and causing stasis.

Intra- and extra-mural tumors, both benign and malignant, may produce mechanical blocking and stasis at any portion of the canal. Displaced uterus, uterine and ovarian tumors and pelvic inflammations and adhesions, are very frequent causes of stasis. Houston's valves often cause obstruction and stasis. Hemorrhoids, fissure, spasm of the sphincter and other rectal diseases, through fear of pain at stool, or by obstruction, cause retention dilatation and atony of the bowel with stasis.

[1]Combe: Autointoxication.

Chief among the symptoms are, incomplete bowel evacuations, constipation, weakness, loss of weight, sallow complexion, pigmentation of the skin, bad taste, bad breath, coated tongue, dizziness, headache, migraine, neuralgia, muscular and articular pains, nervousness, irritability, blues, melancholia, mental and physical apathy, lack of concentration, loss of memory, fear of impending danger, palpitation, poor circulation, especially in the extremities, insomnia, bad dreams, subnormal temperature, digestive disturbances, both gastric and intestinal, together with local symptoms corresponding with the disease causing the stasis.

The sequelae would include almost all diseases, as every tissue of the body is bathed with the poisons and suffers in consequence. Intestinal toxemia produces disease of the joints, kidneys, liver, pancreas, brain, cord, periphial nervous system, heart, blood vessels, blood, lungs, eyes, ears, nose, mouth, throat, stomach, intestines, appendix, genitalia and the ductless glands.

Broadman Reed states: "When we except the exanthemas, malaria, syphilis, tuberculosis and diseases caused by traumatism, metallic poisons and a few other toxic agents or infections from without, practically all the remaining maladies which afflict us and cut short our lives are now directly or indirectly traceable to auto-intoxication." He might add, that by producing blues, irritability and loss of control over temper, it brings more unhappiness into the homes of the American people than does alcohol.

In a majority of cases a diagnosis of intestinal toxemia can be made by a careful history and physical examination. The length of time required for food to pass through the intestines can be told by giving a marker of charcoal or carmine. Indicanuria and the estimation of sulphates in the urine, is no longer considered a correct measure of intestinal putrefaction. Griffiths[2] believes enlargement of the tongue until it becomes too large for the mouth and takes upon itself the impress of the teeth, is one sure sign of toxemia.

By extreme care in the history taking and physical examination, the location of the point and cause of stasis can be ascertained. Hayes[3] states, "Dilated duodenum is shown by marked tympanites in the area behind the right rectus muscle, to the right of the pylorus and situated between the gall-bladder above and the transverse colon below. Pressure upward and backward, with the hand below the umbilicus and the patient in a semi-recumbent or reclining position, usually empties the duodenum in about thirty seconds. It is often possible to hear and feel the rush of gas. The inflated ileum is shown by marked tympanitic note to the left of and below the caecum.

The *x*-ray, which has done so much to further the study of stasis and toxemia, is our most valuable aid in diagnosing stasis, its locations and cause. It should be used in all cases of doubt and in all surgical cases before operation. Lately, in several cases in which the fluoroscope and plates after the bismuth meal showed the stomach and colon within the brim of the pelvis, with numerous angulations in the colon and marked stasis, I was helped in my diagnosis by giving an enema of barium sulphate suspension, the patient in the recumbent position. Examination with the fluoroscope, with the patient still in the recumbent position, demonstrated that the colon up to the caecum would fill rapidly and by manipulation showed the colon would readily return to its normal position and that there were no bands, adhesions or obstructions of the lumen. In these patients medicinal or more properly, mechanical treatment, give promise of cure without surgical intervention. W. S. Bainbridge[4] says, "The vast majority of cases should have been preventable, while hygienic and medicinal treatment if instituted sufficiently early would cure a large proportion. Certainly 9 out of 10 or 19 out of 20 of all cases should not reach the stage calling for surgical intervention."

Failure to cure in most cases is due to lack of knowledge of the cause. Every physician by educating his clientele can prevent a great number of cases. By observing the children of his patrons, noting those that have the habitas visceroptosis, those that are weaklings and generally atonic, and instituting proper exercises and hygiene, he can save them untold misery in later years.

When a case appears with the history, symptoms and clinical evidence of intestinal stasis and toxemia, and these cases come to every one of us every day, we should not content ourselves with prescribing one of the numerous laxatives, purgatives or salines that are in our armamentarium; on the contrary, we should begin at once a careful examination to determine the cause and extent of the condition and then begin a rational treatment.

Careful instructions should be given the patient as to the importance of regularity in going to stool, of the importance of regular habits of eating and sleeping, of out-door exercise, and exercises adapted to the development of the abdominal muscles. We should go carefully into the matter of diet and see wherein it is wrong and give minute instructions, limiting the proteids and increasing the foods that

[2]Griffiths: British Med. Jour., Dec., 1913.
[3]Hayes, M. A. V.: Medical Record, Feb. 28, 1914.
[4]Bainbridge, W. S.: Medical Record, Feb. 28, 1914.

leave cellular and husky remains, due consideration being always given to the digestive capacity of the individual. Visceroptosis and atony, without actual obstruction, should be treated with rest, posture, exercise, supports, massage, hydrotherapy, diet, enemas or colon lavage, etc. The administration of liquid petrolatum or agar agar, to keep the stools soft as well as to add to their bulk, is advantageous.

General tonic treatment is indicated. Patients should be told that it takes months instead of days to effect a cure, and should be impressed with the importance of being persistent in their efforts to get well.

In all cases caused by rectal troubles, the cause of the trouble should be removed. Uterine displacements should be corrected by pessaries or operation. All cases in which there are acute angles held by adhesions, all cases where bands or membranes are constricting the lumen of bowel, or interfering with peristalsis, and all cases of intra- and extra-mural tumors, should be recognized as surgical in the beginning.

THE DIAGNOSIS OF INTESTINAL TOXEMIA BY THE USE OF *X*-RAY.*

BY

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DALLAS, TEXAS.

In 1910, when I first became interested in *x*-ray study of the gastrointestinal tract, following the ingestion of the opaque meal, I little dreamed that it was destined to become a distinct factor in diagnosis and completely revolutionize our ideas concerning the anatomy, as well as the pathology, of this region.

When I was a medical student we knew next to nothing about visceroptosis. We were taught that certain organs, namely, the stomach, jejunum, ileum and colon, occupied certain definite positions in the abdomen and had certain definite boundaries which we were expected to learn. Pain over the epigastric or upper part of the umbilical region, was thought to come from the pyloric end of the stomach, while pain over McBurney's point was a cardinal sign of an inflamed appendix, when, as a matter of fact, these organs may be from six to fourteen inches from these areas.

The use of the *x*-ray and the opaque meal has taught us that we seldom find in actual practice a text-book picture of the gastrointestinal tract, but do frequently find varying degrees of visceroptosis in patients who are in apparent good health. From these observations we are forced to the conclusion that so long as the different sections of the intestinal tract are functionating properly, their position in the abdomen are of secondary importance.

When the patient begins to be distressed in his abdomen, the bowel actions disturbed by periods of diarrhoea, followed by constipation, with headaches and a general feeling of depression, which generally causes the patient to conclude that he is bilious and leads to the use of laxatives or purgatives, which may give temporary relief but actually aggravate the condition for which they are taken, he is affected by some one or more of the many degrees of visceroptosis. Just what condition or combination of conditions lead to visceroptosis, and especially coloptosis with all of its distressing sequence, is a question that is receiving a great deal of attention from many angles, with no prospect of a solution in sight.

It is interesting to know that among the lower animals that lead a natural life, visceroptosis with its train of symptoms is unknown. Who ever heard of an animal in its natural haunts, having chronic constipation? These reminders turn our thoughts toward the Darwinian theory of evolution and go a long way in establishing the belief that the abdominal viscera in man was not originally constructed with the idea of a constantly erect position. Be this as it may, we are forced to the conclusion that as a result of environment, habit and dress, marked evolutionary changes have taken place which have slowly but constantly led to a condition of the gastrointestinal organs abnormal in a large percentage of the human race.

I can state as a fact that ptosis of the stomach and colon is often congenital. I have found this condition to be present in a large number of children of all ages. In a child of eighteen months, suffering from extreme constipation with a distended abdomen, the stomach was found to be dilated, with the greater curvature three inches below the umbilicus and the pylorus two inches to the right of the median line; the cecum was distended and in the bottom of the pelvic cavity, with a sharp angulation at what should have been the hepatic flexure, causing an obstruction to the passage of the colonic contents.

With the aid of the opaque meal we are able to watch the filling and emptying of the stomach and to follow the bismuth or barium salt through every curve or angle of the intestinal canal, outlining the size, shape and location of the stomach, its motility or want of motility, changes in its walls in the form of tumors or ulcers, as shown by incisura, diverticuli, cicitricial contractions, etc., observe the size, shape and location of the different parts of the intestinal canal, showing kinks, angles and constrictions that are factors in the production of obstructions that result in stasis which main symptom has long been known as chronic con-

*Read before the Section on Surgery, State Medical Association of Texas, Houston, May 14, 1914.

stipation, the forerunner of more than fifty per cent of all the diseases of the people of the civilized world.

Without attempting to furnish any evidence as to the cause of visceroptosis, I will attempt to show what actually takes place during the progress of this unfortunate transmigration or transformation.

The two drawings with which I will illustrate these points are actual tracings from *x*-ray negatives that were made from the living subjects when in an erect or standing position.

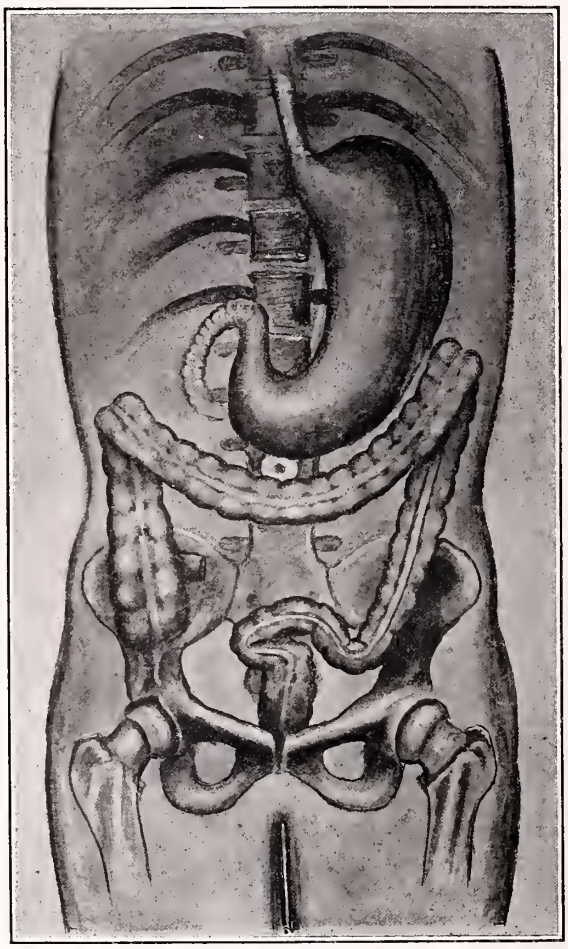

Fig. 1. Illustrating the relative positions of the stomach and colon in the average normal individual when standing.

The first of this series is a schematic drawing (front view) showing the normal location of the organs involved in the pathology of visceroptosis. This is not a text-book picture. It represents about what will be seen on the *x*-ray screen or radiographic plate when examining the average normal individual.

I have purposely omitted the supporting ligaments, liver and other organs. It will not be a difficult task for the reader who has given some time to the study of the gastrointestinal organs to draw a mental picture of the suspensory ligament which is formed from the omentum and is known as the gastrohepatic ligament. Just beneath the gall bladder and about parallel with the common bile duct, is the hepatoduodenal ligament supporting the pyloric end of the stomach as well as the first portion of the duodenum. The omentum continues on to the colon forming the gastrocolic ligament. These ligaments were designed to freely suspend the stomach and colon in the abdomen. The duodenum is seen to describe a graceful curve downward and backward, then upward to where it is firmly fixed by the complete investment of the peritoneum forming the suspensory muscle of the duodenum. As long as these organs remain in their natural position there is no interference with their function on account of position, but unfortunately, such a picture is the exception rather than the rule.

Fig. 2. Illustrating the relative positions of the stomach and colon in an extreme case of visceroptosis in the living subject while in a standing position.

The condition as represented in the second drawing too often obtains. With the descent of the ascending and transverse colon we have three acute angles in the duodenum, the first of which is at the attachment of the hepatoduo-

denal ligament, the second at the duodenal attachment to the hepatic flexure of the colon and the kidney, and the third at the distal end of the duodenum, where it is fixed by the sus-

Fig. 3. Radiograph of an average case of gastroptosis.

pensory muscle. The duodenum forms two sides of a triangle, with such sharp angles as to interfere greatly with its functions. The colon also has sharp angles, one at the hepatic flexure, which has been allowed to sink low into the pelvis, a second about midway of the transverse colon, which may drop to the very floor of the pelvis, and a third at the splenic flexure, which is usually about its normal position. With a picture like this it requires no stretch of the imagination to understand what may and often does take place in a colon occupying such positions.

Before the advent of the x-ray or the development of the present splendid technique in the visible study of the gastrointestinal tract, the above drawings would not have been recognized as belonging to any part of the human anatomy. Had a surgeon discovered the condition and been indiscreet enough to have published such pictures he would have been laughed to scorn and would have been denied recognition by the great (?) surgeons of the world.

When the doctor sees his first case of extreme visceroptosis as pictured on the flouoroscopic screen he can scarcely believe his eyes. He looks and looks again and the amazement grows as the peristaltic waves begin to carry the stomach contents toward and through the pylorous; the filling and emptying of the "bishop's cap," the rapid movement of the duodenum, jejunum and the dense coils of the ileum, the filling and movements of the colon, its position in the very bottom of the pelvis, showing bands, kinks and adhesions that produce every degree of stasis that finally result in chronic constipation and the beginning of invalidism.

In Figure 3 the dense black shadow on the left of the picture is a shadow of the opaque contents of the stomach. The greater curvature is five inches below the crest of the ilium and about the same distance below the umbilicus, which is represented by the lead washer. A comparison of this picture with the second drawing will be proof sufficient to establish the correctness of the drawing. It must be remembered, however, that the stomach may assume almost any shape and position in the abdomen and that any attempt to describe its many phases by a set of drawings would be a failure.

Fig. 4. Gastroptosis with dilatation.

In Figure 4 the stomach is not only low in the abdomen, but is greatly dilated and extends far to the right of the median line. This stomach was accompanied by an extreme degree of coloptosis, a picture of which is shown in Figure 6, and will be described when that subject is reached. Many other degrees of gastroptosis might be shown, but space forbids a more complete presentation at this time.

Figure 5 represents a complication that is frequently seen in patients suffering from gastric disorders. There is a ten-hour residue in

Fig. 5. Gastrointestinal stasis. Adhesion at the hepatic flexure of the colon and dilatation of the caecum.

the stomach. Obstruction at the hepatic flexure of the colon with dilatation of the caecum and a resulting stasis of the caecum and ileum.

Fig. 6. An extreme degree of coloptosis, accompanied by gastroptosis and dilatation as shown in Figure 4.

Figure 6 presents a degree of coloptosis that is frequently seen in extreme cases of constipation. This picture was made forty-eight hours after the ingestion of the opaque meal. No actual disease was discovered. The condition was mechanical and surgery was her only hope.

In Figure 7 we have a graphic illustration of the benefits to be derived from an *x*-ray study of the colon. In this case a long, distended sigmoid gave the appearance of a decided tumor accompanied by extreme constipation, considerable pain at times and great discomfort all the time.

These cases are not exceptions; on the contrary, these extreme conditions are frequently found in patients suffering from some degree of gastrointestinal discomfort.

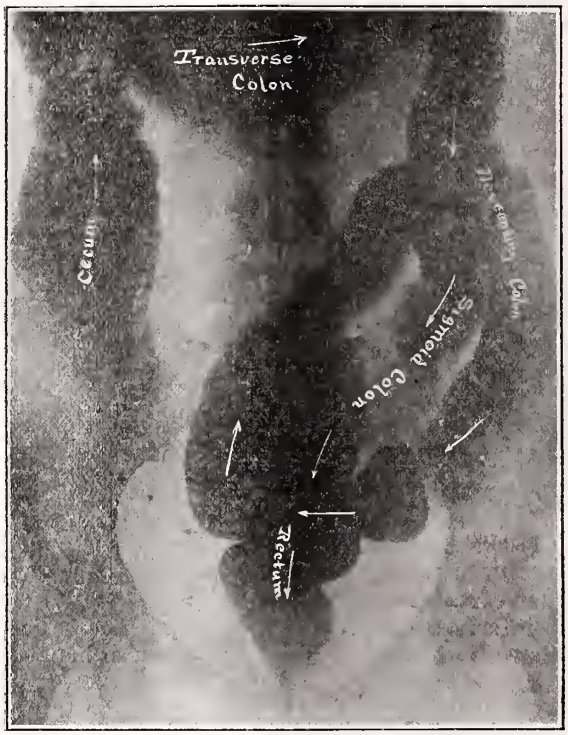

Fig. 7. Redundant sigmoid after the colon was filled with barium sulphate.

The gastrointestinal tract is the most difficult subject with which the roentgenologist has to deal. The chance for error is very great, yet in the hands of a trained diagnostician the *x*-ray findings have shown fewer errors than any other method.

Declared Misbranded.—The Federal authorities have secured convictions under the Food and Drugs Act, against the following "patent" medicines: Nurito, West Baden Sprudel Water, Radam's Microbe Killer, Dr. Hilton's Specific No. 3, Dr. Sullivan's Sure Solvent, Russell's White Drops. With the exception of the first two the products were declared misbranded chiefly because false and fraudulent therapeutic claims were made for them. Nurito was declared misbranded because false statements in regard to the ingredients were made and West Baden Sprudel Water, because it was not a natural water as claimed. (*Jour. A. M. A.*, October 17, 1914).

RESUME OF THE CHEMICAL ANALYSIS OF THE STOMACH CONTENTS IN 100 CONSECUTIVE CASES OF INDIGESTION.*

BY

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In this paper I shall present a resume of my findings in 100 consecutive cases of indigestion treated in my private practice.

In this investigation I have been impressed with the necessity of obtaining a careful family history, previous personal history, including body habit, and date of onset of the existing condition and the need for a thorough physical examination of the heart, lungs, urine and, if necessary, the blood, sputum, feces, vision, occult blood, blood pressure, chemical and microscopic examination of the gastric contents. It is best not to prescribe for a patient suffering with gastric trouble, until the complete physical examination and chemical analysis of the gastric contents have been made, and one should remember that in the majority of cases the patient is not suffering from indigestion of meats and albuminous foods, but of starchy foods, and that it is doubtless this which produces the gaseous distension and general gastric distress. 60 per cent of my cases were suffering from an excess of hydrochloric and hyperchlorhydria more frequently due to functional than organic trouble.

I do not agree that in all cases of indigestion there is some other trouble, such as appendicitis, gall-stones or duodenal ulcer, which lies back of and is producing the indigestion. On the other hand, it has been my experience, extending over many years, that Kemp[1] is correct when he says: "As about 50 per cent of our private office cases suffer from true hyperchlorhydria (an excess of free hydrochloric acid, in addition to excessive total acidity,) the writer absolutely disagrees with Moynihan in his statement that the term hyperchlorhydria is a misnomer due to an organic condition and is never functional, and that the presence of an excess of acid is most infrequent. Hyperchlorhydria results chiefly from dietary indiscretions and also is associated with chlorosis, gastroptosis, and nervous conditions."

In my series of 100 cases, here reported, I met with only 2 positive cases of appendicitis, and 2 other possible cases. Gall-stone occurred 4 times. I would place nephritis higher in the list of causes of indigestion than either appendicitis or gall-stone. Nephritis occurred in 15 per cent of my cases.

I do not know why I have met with so few cases of gastric ulcer—that is, cases that present well defined signs and symptoms of gastric ulcer, such as pallor, emaciation, pain immediately after eating, hematemesis, and occult blood in the gastric contents and feces. I have been able to make a diagnosis of gastric ulcer in only 3 cases of indigestion out of the series.

VARIATION IN PERCENTAGE OF FREE HYDROCHLORIC ACID.

Free hydrochloric acid was normal (.040 to .073 per cent) in 16 cases or 16 per cent; diminished (below .040 per cent) in 10 cases or 10 per cent; increased (above .073 per cent) in 60 cases or 60 per cent. and totally absent in 17 cases or 17 per cent. In those cases in which the free hydrochloric acid was totally absent 2 were found to be gastric cancer; the others showed no malignant disease and 3 were evidently achylia gastrica.

INCREASED PERCENTAGE OF FREE HYDROCHLORIC ACID.

Free hydrochloric acid was above .073 per cent in 60 out of 100 cases or 60 per cent; above .10 per cent in 46 cases or 46 per cent; above .15 per cent in 20 cases or 20 per cent; above .20 per cent in 7 out of 100 cases or 7 per cent.

TOTAL ACIDITY.

Total acids were normal (35-60) in 58 cases or 58 per cent; below 35 in 21 cases or 21 per cent; above 60 in 14 cases or 14 per cent; above 88 were 4 or 4 per cent. The highest percentage of total acidity found was 100, and total acidity was not determined in 1 case.

MOTOR POWER OF THE STOMACH.

In the early part of my work I used the salol test to determine the motor power of the stomach, but finding it unreliable I depended after that on the amount of gastric contents found about 4 hours after a light meal. In this way the motor power was determined in 9 cases. In 5 of these it was normal, and in 3 deficient. In one case (a case of achylia gastrica) there was hypermotility, and in two tests I found that at the end of one hour the stomach had completely emptied itself except for a small amount of mucus.

ABSORPTIVE POWER OF STOMACH.

The absorptive power of stomach was found deficient (over 15 minutes) in 78 per cent of the cases examined (71); normal in 20 cases, and not determined in 9 cases. It is possible that we should designate 20 to 25 minutes as the normal instead of 15 minutes for this test. As to the question of testing the absorptive

*Read before the Section on Medicine and Diseases of Children, State Medical Association of Texas, Houston, May 13, 1914.

1. Kemp: Diseases of the Stomach, Intestines and Pancreas, 1912.

power of the stomach after administration of potassium iodide, some writers are of the opinion that this may be really a test of the motor power. Whichever it may be, I wish to here call attention to its value as a sign of increased thickness of the stomach walls, such as occurs in gastric cancer in the early stages. In one case of gastric cancer in this series I found that the potassium iodide did not appear in the saliva until the end of 62 minutes. In another case of gastric cancer I detected it at the end of 45 minutes. In both cases operations were performed.

DIGESTIVE POWER OF GASTRIC JUICE FOR ALBUMEN. (MEATS.)

Of this series of cases the digestive power of gastric juice for albumen was good in every case in which the free hydrochloric acid was in excess, or even when slightly deficient (except in one or two cases,) and the digestion of albumen was always totally absent when the hydrochloric acid was totally absent. The digestive power for albumen was not determined in 4 cases.

DIGESTIVE POWER OF GASTRIC JUICE FOR STARCH (BREADS.)

The digestive power of starch (breads) was deficient in 77 per cent of the cases of hydrochlorhydria; that is to say in most instances where the hydrochloric acid was in excess, the starch digestion was deficient. Of the 17 cases in which the free hydrochloric acid was totally absent, the digestion of starch was generally good. In 2 cases of cancer digestion of starch was deficient.

TEST FOR MILK CURDLING FERMENT (RENNIN.)

The milk curdling ferment was active in 81 cases or 90 per cent; inactive in 8 cases, and not determined in 11 cases. If the gastric juice had been neutralized with decinormal solution of soda before being added to the milk, I am quite certain the percentage of cases in which the rennin is reported as being active, would be much smaller. It is probable that some day we may have a better test for rennin than the one now recommended.

PRESENCE OF BILE IN THE GASTRIC CONTENTS.

Out of the 100 cases bile was tested for in 90, and was detected in 5. I am now inclined to the belief that had I employed in my earlier work a more delicate and accurate test than the one generally recommended in the textbooks, I would have found bile in a much greater percentage of cases. Bile in small quantities in the gastric juice will not always produce the play of colors expected when nitrous acid is added to the filtered gastric content.

In *The Journal of the American Medical Association*, May 29th, 1909, I described a delicate and reliable test for bile in the gastric contents. The test consists in filtering the gastric juice through an ordinary white filter paper, a few hours afterward adding a drop or two of nitrous acid to the upper edge of the filter paper, allowing it to trickle down the sides of the paper. If bile is present there will be the usual play of colors, especially near the upper border of the filter paper, just above the food remnants. Sometimes the food remnants may be discolored by nitrous acid, but this should not be considered when looking for bile in small quantities.

SIZE AND POSITION OF THE STOMACH.

The stomach occupies a position subject to considerable variation, especially with reference to the umbilicus. Formerly it was the custom to regard a stomach as being dilated if the fundus projected below the umbilicus. No definite position has yet been decided upon for the fundus of the stomach. The number of cases in which I found the fundus below the umbilicus after having been inflated with air, in a series of 86 cases examined, was 49 or 56 per cent, and normal (on a level with the umbilicus or above it) in 37 cases or 43 per cent. Hyperchlorhydria (free HCl above .073 per cent) with dilatation of the stomach was found in 16 cases out of 53 examined or 30 per cent. In 9 cases in which the free hydrochloric acid was totally absent, the stomach was normal in size in 5 cases; dilated in 3 cases, and not determined in 1 case. The size and position of the stomach was not determined in 14 cases.

SEX; AGE; SEASON.

Of this series of 100 cases, 66 patients were male and 34 female.

The age of the patients was determined in 87 cases. From 18 to 21 years, 8 per cent; 22 to 35 years, 34 per cent; 36 to 73 years, 50 per cent. These figures show that the greater number of cases of indigestion occur in advanced age.

Of these cases, 28 per cent occurred in the Fall, 32 per cent in the Spring; 22 per cent in the Summer, and 17 per cent in the Winter, which develops the fact that gastric troubles are most common during the spring and fall months.

In those cases in which I found the hydrochloric acid deficient or totally absent, I can not recall a single instance in which the administration of the acid restored the secretion to normal. It will be observed that free hydrochloric acid was totally absent in 17 cases or 17 per cent. In one of these cases the acid was restored to normal (.058 per cent) within 4 days without the administration of any drug whatever. The only treatment I employed was a carbohydrate diet, and daily douches, first

with cold water for a few moments then with hot water for several minutes.

ACHYLIA GASTRICA.

Kemp[2] distinguishes two forms of achylia gastrica, namely, (1) That form due to a functional perversion of the stomach, such as might occur in neurasthenia, or, in other words, a neurosis without organic change in the gastric mucosa and characterized by the absence of gastric secretion, which may be transitional; (2) an atrophy of the mucous membrane of the stomach, the result of an organic change such as occurs in chronic catarrhal gastritis, with round cell infiltration ending in permanent atrophy of the mucosa and glands of the stomach, and causing an absence of hydrochloric acid, pepsin and rennet.

Strümpell[3] divides achylia gastrica (or long continued anacidity) into three forms, as follows: (1) Achylia or achlorhydria, which may occur in certain diseases of the stomach, such as chronic gastritis, and in gastric cancer. These he designates "symptomatic achylia;" (2) achylia or achlorhydria, may appear as a necessary result of marked atrophy (anadenia ventriculi) of the gastric mucous membrane. In this condition the gastric contents show an absence of hydrochloric acid and pepsin, rendering it devoid of peptic activity. In such cases of anadenia, the picture of pernicious anemia may be observed, and a blood examination only can settle the diagnosis. Aehylia gastrica may be associated with pernicious anemia. In achylia there may be a high degree of anemia, but the blood picture is not that of the pernicious type. In this group intestinal disturbances are notable. Of 115 cases observed by Stockton[4] the bowels were constipated in 52 cases, and diarrhoea occurred in 31 cases. In such instances the stomach may hurry the food on into the intestines before the end of one hour, producing consequent pain and discomfort in the abdominal region. In one of my cases the stomach seemed to empty itself completely before the end of one hour. In another case the bowels moved 10 to 20 times a day, the food being undigested. In the latter instance the absorptive power of stomach was 35 minutes. (3) The third form mentioned by Strümpell, is what he terms "functional achylia," a condition which comes on more or less suddenly with anorexia, nausea and vomiting. In such cases there may be a total absence of hydrochloric acid, while pepsin may be present or entirely absent. With suitable treatment the symptoms diminish or vanish, but there is no change with regard to the absence or approach to absence, of hydrochloric acid and pepsin. As to the words "achylia," and "anachlorhydria," Strümpell says that in a strict sense the name achylia should be employed only for that condition in which there is a constant absence not only of hydrochloric acid, but also of pepsin, indicating a complete drying up of the gastric juice. The word achlorhydria (or anacidity) he restricts to those cases in which the free hydrochloric acid is never demonstrable but in which pepsin is found.

ACHLORHYDRIA HEMORRHAGICA GASTRICA.

Pilcher[5] states that in 4,000 stomach contents examined by him at the Mayo clinic, there were 271 cases of chronic gastritis (or one in every 15) in which he found free hydrochloric acid absent, and occult blood always present. He regards this condition as a symptom of chronic gastritis of reflex origin and to which he gave the name "anachlorhydria hemorrhagica gastrica." In 156 of these 271 cases, the history showed that the gastric trouble was of reflex origin, and depended upon various organic diseases, generally situated elsewhere than in the stomach. Out of the 271 cases 100 were operated upon during the existence of achlorhydria, and the following conditions found: Involvement of the appendix, 36 cases; gall-bladder, 32 cases; gall-bladder and pancreas, 16 cases, and stomach in 16 cases. In 12 cases both the appendix and gall-bladder were involved. In achlorhydria hemorrhagica gastrica, Pilcher believes that the gastric contents are characteristic. He says that the bread of the test meal shows practically no change of color ranging from yellow to a light orange, and occasionally of rancid odor. The filtrate is invariably clear, and may have a slight yellowish tinge. The total acidity varies between 6 and 8, and is due to the acidity of the ingested bread. Free hydrochloric acid is never present. Combined acids are practically negative. Lactic acid is present in about 15 per cent of the cases, but the Strauss method must be used, as by Uffelman's test a perfect reaction is nearly always obtained, due to the lack of masking hydrochloric acid. The blood reaction is always present but only in the "occult" variety, never traumatic and due to erosions, perhaps from bacterial growth. Food remnants are seldom found. The biuret reaction was found in a much greater percentage than noted by other observers. In these cases the majority of patients complained of distress in the epigastrium, amounting almost to a pain, and of a gnawing or burning character.

In my series of cases, here reported, I met with the following organic diseases, in the

2. Ibid.
3. Strümpell: Text-Book of Medicine, 1912, Vol. I.
4. Stockton: American Journal of the Medical Sciences, August, 1909.
5. Pilcher: Absence of Hydrochloric Acid with Blood in the Stomach Secretion (Achlorhydria Hemorrhagica Gastrica), as a Symptom of Chronic Gastritis, 1910.

order of their frequency: Nephritis, 15 cases or 15 per cent; gall-stone, 4 cases; chronic appendicitis 2 cases, with 2 other possible cases; gastric ulcer, 3 cases; achylia gastrica (anadenia,) 3 cases; gastric cancer, 2 cases; stomatitis, 2 cases; aortic stenosis, 1 case; aortic regurgitation, 1 case; mitral regurgitation, 1 case; tuberculosis, 1 case. Out of the 100 cases, 1 was able to find (excluding stomatitis, gastric ulcer and gastric cancer) 26 cases of indigestion due to organic disease situated elsewhere than in the stomach.

A large number of my cases seemed to be brought on by the use tobacco, either chewing or smoking, while a large number were due to overwork and mental anxiety.

DISORDERS OF THE STOMACH, WITH REFERENCE TO DISEASE IN THE OTHER VISCERA.*

BY

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Aesop in one of his fables gives an account of the other members of the belly revolting against the stomach, whereupon the stomach promptly became deranged and killed the body that contained it. In this fable is represented this idea, that there is no organ in the body the disease of which will not affect the stomach. It is true that our text-books still describe, acid gastritis, hyperchloridia, hypersecretion, etc., as diseases of the stomach and "Indigestion and Dyspepsia" as diseased conditions *per se,* when in fact they are not diseases but symptoms through which the stomach is trying to give warning that there is disease elsewhere.

The pathology of the stomach was formerly built upon post mortem findings, which were often faulty because they did not show the picture of the disease as it existed in the curable period. Surgery has done much to further a better understanding of diseases of the stomach, has exploded many old theories and has built up a pathology based upon the living subject. Many obscure conditions have been brought to light. When surgeons began to explore the upper abdomen, they began to see with the eye conditions as they exist in the curable state, and not as terminal findings. This pathology, based upon the living subject, has revolutionized our ideas of diseases of the stomach.

The stomach has several important functions, the principal one of which is storage. It holds the food and passes it slowly into the intestine for digestion and assimilation. The gastric secretions are largely formed in the pyloric end of the stomach and when the secretions and food become mixed, the stomach passes it, a little at a time, through the pylorus. When a definite amount of acidity exists in the pyloric antrum, the pylorus opens, and when a definite amount of acidity exists in the duodenum the pylorus closes. The duodenum has control of the pyloric gateway, though such right is shared to some degree by all derivatives of the fore-gut.

The control of the antrum of the stomach and the rest of the intestinal tract, is primitive and is obtained by internal secretions. This control existed before the cerebro-spinal nervous system was developed and its influence continues. This control acts by chemical stimulation through the blood stream and sympathetic ganglia. The fundus of the stomach is a late development and is more or less under the control of the cerebro-spinal nervous system. The stomach is the place, therefore, where derangements of the entire intestinal tract may reach the conciousness of the individual. This is the reason that hernia, appendicitis, intestinal obstruction, etc., cause nausea, vomiting and pain in the stomach. The distress arises from nature's effort to prevent food from passing the stomach, which produces a condition commonly known as "pyloro-spasm." If the food is held too long in the stomach a marked change occurs in the secretions and we have a group of symptoms develop which we call "dyspepsia and indigestion." If we make a chemical examination of the contents of the stomach at this time we are apt to infer that the trouble is the result of the altered secretions, whereas the motility is at fault, from some condition elsewhere in the economy.

The mechanical action of the stomach is more important than the chemical action. The movement of the stomach aids the gastric juice in breaking up the food and passes it toward the duodenum, and anything which interferes with this motility causes a definite disturbance in the stomach. The effort to construct a pathology on chemical findings alone has proven to be unreliable, for the same chemical findings may be met with in several distinctly different diseases. Digestion depends chiefly upon the nerve supply and is brought about by normal reflex action, and as the stomach acts in sympathy with every constitutional derangement, any disturbance in the sympathetic nervous system must have its effect upon digestion.

Practically, there are but two primary diseases of the stomach, cancer and ulcer. When there is a gastric disturbance there will be found, except in these two instances, an affection of the digestive tract or some other organ with which the stomach acts in sympathy. Gastritis has for years been described as a disease *per se,* but it is now considered a complication. The stomach has been the recipient of

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more "dope" than any other organ, for it is so easy to say to a patient, "you have stomach trouble," when, as a matter of fact, the patient may be suffering from tuberculosis, nephritis, or an organic heart lesion. Stomach disorders are but danger signals that there is disorder elsewhere.

The most common of stomach disorders, hyperacidity, is found in patients suffering from appendicitis, gall-stones, gastroptosis, etc. It is seen in heart lesions and nephritis, and occurs as one of the early signs of tuberculosis and a beginning hyperthyroidism. It is seen in women with uterine displacements, and ear trouble and eye strain have been listed as causes. Pyorrhea alveolaris and post nasal catarrh, are responsible for some of these conditions, due to a constant swallowing of pathogenic organisms and the absorption of pus. It is found in many cases where the basic trouble is some nervous or psychological disturbance. Alcohol, tobacco and coffee increase the gastric secretions by increasing the irritability of the glandular apparatus. Habitual overeating plays an important part in the production of hyperacidity, as Starling and Pawlow have shown that the hydrochloric acid can be increased or diminished by diet. People of highly excitable nature, who are brain workers and who fail to secure the proper amount of exercise, suffer from hperacidity. In this disorder we are dealing with a complex condition and not simply a local chemical change in the stomach. In no pathological condition is a careful history and a completed physical examination so important, and we must search carefully, realizing that the disease is elsewhere, in order to arrive at a diagnosis. From a study of 50 cases with stomach symptoms predominating, we made the following diagnoses, and treatment directed acordingly has resulted in relief. In most of these cases there was hyperacidity, which ran, total acidity, 30 to 95; free hydrochloric acid, 12 to 72.

Heart Disease	7
Appendicitis	11
Duodenal ulcer	3
Nephritis	3
Ulcer of the stomach	3
Gall-bladder disease	7
Tuberculosis (beginning)	4
Cirrhosis of the liver	1
Prostatic disease	2
Retroverted uterus	2
Ovarian cyst	1
Inguinal hernia	1
Rheumatism	2
Neuroses	3
Total	50

For convenience of description, the causes of stomach disorders may be divided into the following groups:

(1) General diseases, such as diseases of the lungs, heart, kidneys, arterio-sclerosis, tabes dorsalis, etc; (2) congenital or acquired defects of the abdominal and pelvic viscera, gastro-intestinal neuroses, gastroptosis, enteroptosis, atonic dilatation of the stomach, etc; (3) surgical diseases, such as appendicitis, gall-bladder disease, duodenal ulcer, etc; (4) conditions in which the stomach is actually diseased, the principal examples of which are, ulcer and cancer, representing about 10 per cent of the causes of all stomach disorders.

(1) In the general diseases the disordered stomach may obscure the actual disease and we give pepsin and hydrochloric acid when we should be giving eggs, beef and fresh air, for a beginning tuberculosis. The first manifestation of tuberculosis of the lungs may be gastric distress, hyperacidity, flatulence and vomiting. In chronic nephritis, "dyspepsia" and loss of appetite are common and a severe, uncontrollable vomiting may be the first symptom of the disease. In mitral regurgitation, gastric disturbance is common, due to a broken compensation, and the resulting congestion of the stomach and liver often provoke severe attacks of vomiting, resembling symptoms usually found in ulcer. We have treated cases in whieh the symptoms resembled cancer, and have seen every symptom disappear when the treatment was directed to the heart. In arterio-sclerosis gastric symptoms may appear a considerable time before the characteristic symptoms of the disease develop. Tabes dorsalis may begin by gastric disorders and other symptoms of the disease may be absent for years. Any chronic general disorder may in the beginning manifest itself by prominent stomach symptoms.

(2) In disorders caused by congenital or acquired defects in the viscera the stomach is not the offender. The symptoms are due to the physical defects. Stomach complaint is the inborn manifestation of neurasthenia, and to cure these conditions we must go generations back, and in this we are limited. Gastroptosis, enteroptosis, and the like cause a train of stomach symptoms, but the fundamental cause is an outside factor.

(3) From 30 to 40 per cent of *all* stomach disorders are caused by surgical diseases, such as appendicitis, pancreatitis, gall-bladder disease, duodenal ulcer, etc. The duodenum, pancreas, gall-bladder and appendix, are so closely connected embryologically, anatomically and physiologically with the stomach, that any change in one might be expected to exert changes in the other. MacCarty states that erosions have been produced when the vagus is irritated, and experimental work has shown that irritation of the colon will cause a definite disturbance in the stomach. Women with retroverted uterii often have nausea and vomit-

ing from irritation to the colon. Clinical experience has shown that stomach disorders are often due to the appendix. Chronic appendicitis may give rise to no local symptoms and yet cause a distressing indigestion. The only symptom of chronic appendicitis may be a constant recurring hyperacidity, and chronic appendicitis is frequently the only etiological factor in the production of hyperacidity.

Appendiceal symptoms may often be referred to the epigastrium and may simulate duodenal ulcer so closely as to render the diagnosis difficult. Many patients who have pain in the epigastrium, a sensation of fullness, bloating and hyperacidity after eating, will be found to have chronic appendicitis and after appendectomy the symptoms will disappear.

The gall-bladder has the nerve that supplies the motor and secretory fibres to the stomach, that is, the vagus. In addition, the gall-bladder and stomach are intimately connected with the same sympathetic ganglia and receive fibres from the same spinal nerves. It is easy to see, in this relation, that there exists a mechanism capable of producing almost any variety and degree of disturbance in the motor and secretory functions of the stomach. Victims of gall-bladder disease almost always have "indigestion and dyspepsia."

Duodenal ulcer is one of the most common causes of stomach disorder. A few years ago this disease was thought to be rare but it is now known to be quite common. It is in this class of cases that we have typical dyspepsia. These patients have pain and hyperacidity coming on from 2 to 4 hours after meals, with a regurgitation of the acid content of the stomach. It is characteristic of this pain that it comes with regularity and can be relieved by food or an alkali. It is this class of patients whose "indigestion" wakes them at night, with an attack of what they term "heart-burn," who have ulcer. The only symptom of duodenal ulcer may be a persistent hyperacidity, coming on from 2 to 4 hours after meals.

(4) In cancer and ulcer, and the surgical diseases, surgery offers the only logical treatment. While it cannot be denied that there are cases of ulcer that will respond to medical treatment, it is the opinion of most internists and surgeons that chronic calloused ulcer of the stomach or duodenum is best treated by surgical measures.

It is the object of this paper to impress the fact that when patients present themselves complaining of "stomach trouble," "indigestion" or "dyspepsia," we must look beyond the stomach in order to arrive at the cause, and thus avoid the humiliation of treating the stomach and find out later that we should have directed our attention to some other viscera.

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AMOEBIC INFECTION.*

BY

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Amoebic infection has always been a prevalent and dangerous disease in the tropics. In sub-tropic and temperate countries it seems to be on the increase. In the United States it is prevalent in the great ports, especially Galveston, New Orleans, San Francisco and Baltimore. Prevalence in these loealities is no doubt due to immigrants and soldiers of the U. S. Army coming from tropical countries. But the disease is not confined to these people. It seems to be increasing among the natives in the interior, and while a few years ago amoebic dysentery was unusual outside of ports of entry, except in those returning from tropical countries, at the present time it is very prevalent among the natives in some localities in the South, and is encountered sporadically over the greater portion of the United States. No doubt the opening of the Panama Canal will increase the carriers of this disease in the state of Texas, unless proper precautions are taken. I believe that a more thorough dissemination of knowledge concerning amoebic infection, among physicians and laity, will check its spread and finally lead to its extermination.

PREDISPOSING CAUSES.

It is more prevalent in the summer and autumn months. Males are more susceptible than females, and the white race than the black or yellow race. The greatest number of cases occur in adults from the 20th to the 40th year, but no age is exempt. It is not uncommon in

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children under ten years. Among animals, cats are especially susceptible to experimental infection, and the disease prevails no doubt in the feline tribe in infected localities.

SOURCES OF INFECTION.

In tropical countries all persons are liable to be attacked who do not take proper precautions in regard to their drinking water. Contaminated surface water is a fertile source of infection. In some of our cases, we have been unable to account for infection except from contaminated fruit or vegetables.

When we reflect that pathogenic amoebae are passed with the stools of infected men and animals, in large numbers; that encysted forms survive a heat below 60° C., and that freezing does not destroy them, it is evident that when the soil in a locality has been infected, the residents may be infected and reinfected indefinitely.

DESCRIPTION OF AMOEBAE.

Suffice it to say that the amoebae are free, living, autogenetic, animal cells. Harmless amoebae are a common form of microscopic life, and are found in great numbers in stagnant water. Certain types of amoebae are peculiarly adapted to life in the body of man and certain animals. For practical purposes we are concerned only with those types which cause disease, or which may be confused with such. From our experience, it seems only necessary to be able to recognize and differentiate the two prevalent forms, *viz*: the Entamoebae histolytica and the Entamoebae coli. (The prefix "ent" is used to denote the adaption of amoebae to intestinal life.)

In the following table the important points for differentiation are given:

	ENTAMOEBAE COLI. (Non-pathogenic.)	ENTAMOEBAE HISTOLYTICA. (Pathogenic)
Size.	Average 10 to 20 microns; may vary from 5 to 50 microns.	Average 25 to 50 microns.
Shape.	When at rest, spherical or slightly oval.	When at rest, generally spherical.
Color.	Peculiar dull grayish.	Ectoplasm almost colorless. Endoplasm light gray or tinged with green.
Cytoplasm.	Difficult to distinguish ectoplasm from endoplasm. Cytoplasm made up nearly entirely of endoplasm.	Two distinct portions, ectoplasm 1/3, hyaline and highly refractile; endoplasm 2/3, granular reticular structure, coarser than ectoplasm and less refractile.
Vacuoles.	Only occasionally found.	Endoplasm generally contains one or more.
Nucleus.	Usually distinctly visible and from 5 to 8 microns in diameter.	Indistinct, usually invisible.
Motility.	Sluggishly motile.	Actively motile.
Pseudopodia.	Short and blunt.	Finger like shape, large in size.
Phagocytic.	Power for red cells absent.	Power for red blood cells active. Endoplasm often filled with them.

Entamoebae are best found in the fresh warm stool; or by passing a protoscope or rectal tube, we obtain some mucus, and examine a portion on a warm slide immediately. Specimens of stools should be examined as soon as possible after being passed, though the Entamoebae histolytica may retain its motility for several hours when kept at body temperature. Usually mucus is present, and a bit of this is taken for

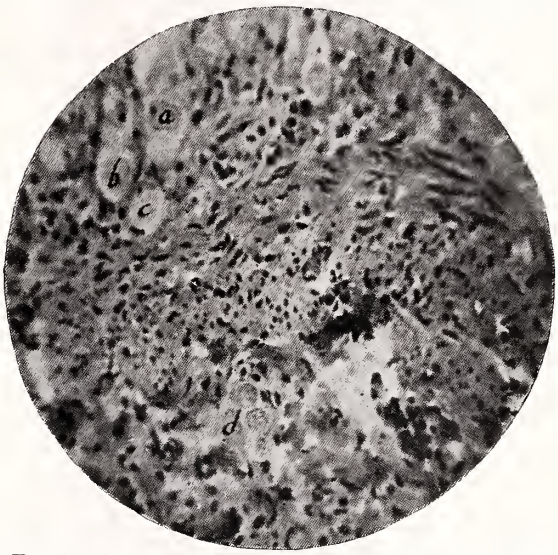

FIG. 1. Amoebae imbedded in the muscular coat of the intestinal wall at a. b. c. d. Specimen stained with haematoxylen.

examination. If no mucus is present, then a drop of the liquid portion of the stool is taken. Care should be exercised to have a warm slide, and if the room temperature is cool it is well to carry out the examination near a radiator or stove. A cover glass should be dropped lightly on the specimen, avoiding pressure. I use a 1/6 lens and a No. 2 objective.

PATHOLOGY.

It is beyond the province of this paper to take up in detail the description of all the pathological processes produced by amoebae. The caecum is most often primarily infected, and the rectum and sigmoid next in order of frequency. Any part of the large intestine may be infected, and in old and severe cases the entire colon may be riddled with ulcers. Preceding ulceration, entamoebae make their way into the submucosa. Marking this point is a small nodular area projecting into the lumen of the intestine. There is soon necrosis of this area, and a small ulcer is formed. The ulcers spread by invasion of the surrounding structure, both laterally and

downward, becoming larger and larger, finally reaching the muscular coat of the intestine. A typical ulcer has raised edges, which are undermined; and presents a very shaggy appearance.

Fig. 2. Amoebae imbedded in the mucosa of the intestine.

Ulcers vary in size from 0.5 to 10 c.m. in diameter. When infection of the intestinal wall has taken place, the amoebae are found in greater or less numbers, according to the severity of the case, in the submucosa, muscular coat, and even in the serosa. They are found isolated or in colonies, and at a distance from an ulcer. Such foci can, and no doubt do persist for months, perhaps years, without special signs; and then when insult or irritation has been applied, give rise to a new attack. Whether the amoebae in these foci exist in a purely vegetative form, as cysts, or undeveloped cysts with possibilities of division, is not yet known. The rapid penetration of the intestinal wall and latent foci make it possible to understand the early and late liver abscesses. Strong, Osler and McCrae's "Modern Medicine," says:

"There are periods in the course of amoebic dysentery, particularly in the early stages, in which symptoms are entirely lacking. Hence, when amoebae of the histolytica type are found in the stools of healthy individuals, we cannot say that they are not suffering from an early or late form of the disease, or that the malady does not exist in its incubation period unless we follow them over long periods of time in which no disease develops. In other cases in which infection with the Entamoeba histolytica is present, the infection may be of so mild a character as to produce practically no symptoms unless the resistance of the patient is lowered by other intercurrent disease. It is not necessary to suppose in these cases that lesions are always present."

The path by which the amoebae reach the liver and other organs which are sometimes infected, varies. In case of the liver, infection may take place through the blood vessels. lymphatics, or through the peritoneum. It is conceded by most authorities that the most probable way is through the portal vein. In sections of the intestine, amoebae are frequently observed lying in close proximity to, or in the capillaries. Amoebae have been demonstrated in the exudate covering the surface of the liver. This path of infection may account for the location of so many liver abscesses at the upper portion of the right lobe.

PROPHYLAXIS.

Sufferers from amoebic infection should be advised concerning the infectious nature of their disease. And since the stools carry the infection these should be made harmless. In cities where the source of vegetable supply is uncertain, and largely in the hands of ignorant and careless workmen, and especially in places where sewage is used for fertilizing gardens adjacent to cities, it is imperative to avoid eating uncooked vegetables, unless our health boards should devise an efficient means of eliminating this source of infection. Water, unless known to be pure, should, of course, be boiled.

I believe that the most efficient prophylaxis is a thorough treatment of each case until repeated examinations of the stools show absence of all amoebae.

TREATMENT.

When administered per orem or per rectum, treatment which acts in a purely local manner, as bismuth, opium, astringents, etc., has a good

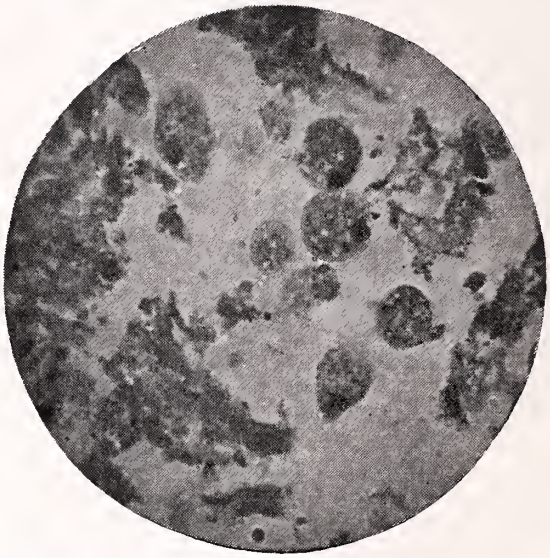

Fig. 3. Amoebae in the ulcerated surface of the intestine.

effect and cases are sometimes apparently cured when treated in this manner. It is quite evident from the pathology, that simple healing of the ulceration on the surface of the intestinal mucosa does not necessarily cure the disease.

Ipecac has been considered very efficient in the treatment of amoebic dysentery for many years, and when given in doses of from ½ to 1 drachm daily, the results are good in many cases. But ipecac, when given in such large doses is, of course, highly emetic. To obviate this it is given in salol coated pills. These usually pass the stomach before disintegrating. But in spite of this, most of the patients so treated suffer greatly from nausea.

Rogers of Calcutta, in 1912, was the first to find that the efficiency of ipecac in amoebic infection was due to the alkaloid emetine (emetine is not emetic. Cephaeline is the emetic principle.) Comparing the relative efficiency of ipecac and emetine, the latter of which he gave subcutaneously, Rogers reported that of 30 cases treated with ipecac, there were 11 deaths, 13 incomplete cures, 6 complete cures; of 25 cases treated with emetine, there were 4 deaths and 21 complete cures. Of the 4 deaths, two were persons treated in extremis and died in less than three days after beginning the treatment. The other two died of intercurrent infection.

Later reports are not quite so favorable as Rogers' early report. It has been found that cysts are slow in disappearing, and that some strains of amoebae are more tolerant to emetine than others[1] [2].

During the past year I have treated 14 cases of amoebic infection. The results were good in every case, and 10 of the patients have no symptoms of the disease at the present time. Three of the cases were treated with ipecac. Eleven were treated with emetine hydrochloride. All had high injections every day or every other day, containing quinine bisulphate 1/500; or pulv. ipecac 2 drachs and Tr. opii, 10 drops to a pint of water. Sufficient emphasis has not been laid on the importance of high injections of solutions of known amoebicidal value, as a necessary part of the treatment. Emetine hydrochloride given hypodermically or intravenously, kills all amoebae in contact with tissue having a good blood supply. But there is much debris in the colon, and partly detached shreds of muscosa, which can be reached only by the local treatment. I also make it a rule to give a purge of castor oil or epsom salts, every other day. The diet should not leave much debris after digestion, and should be soft and non-irritating.

To illustrate the symptomatology and diagnosis, and some points on treatment, I report briefly the following cases:

Case 1.—Male, age 35. Residence, El Paso; former residence Fort Worth. Health good until 3 years ago, at which time he had dysentery, and amoebae were found. At that time he was treated with quinine injections and internal medication for several weeks. The stools became apparently normal, and free from amoebae, and he was pronounced cured. He had no dysentery during the following three years, but never felt well and did not regain his former weight. However, he continued his work as a promoter. He consulted me on June 6, 1913, on acount of stomach distress, loss of appetite and weakness. He was anaemic but fairly well nourished. Temperature and pulse normal. General examination negative, except for some tenderness about the caecum. He was having one or two stools a day. After giving a purgative I found abundant amoebae histolytica in the stools.

The patient was put to bed and given 1-½ oz. castor oil at 8 a. m.; at 4 p. m., ¼ gr. morphine sulphate and 1/150 gr. atropin sulphate. One half hour later he was given two 5 gr. salol coated ipecac pills, which were repeated every 10 minutes until 1 drachm had been taken. He was very much nauseated for a few hours, but with perfect quiet, and with ice to the throat and epigastrium, did not vomit. The following morning I gave a high enema containing 2 drachms ipecac and 15 drops of deodorized Tr. opii, which was retained two or three hours. This treatment was repeated on the second, third and fifth days. On the third day I found no amoebae, but some encysted forms. After the fifth day I was unable to find amoebae of any kind. However, I had the patient continue taking two 5 gr. ipecac pills at bed time for the following three weeks, and ipecac enemas twice a week. The patient made a good recovery, and his health was good six months later, when I saw him.

Case 2.—Mexican boy, 7 years old. He had always lived in Juarez. Had suffered with dysentery for three months, and was much emaciated and very weak. He complained of distress in the abdomen and nausea, and had much tenesmus, with frequent stools containing a little bloody mucus. Examination of the stools showed abundant amoebae histolytica.

Treatment: First day, ⅓ gr. emetine hydrochloride; high colonic flushing with 1/500 quinine bisulphate. Second day, castor oil, a. m.; afternoon, ⅔ gr. emetine hydrochloride, and colonic flushing. Symptoms better. Third day, same treatment, much improved. Fourth day, repeated treatment; stools examined, no amoebae; two normal stools in 24 hours. Sixth and eighth day, emetine repeated. Eighth day, patient discharged and parents advised to give quinine enemas twice a week for the following two weeks. There has been no return of symptoms, though I had no opportunity for further examination of the stools.

Case 3.—Physician. Until three years ago had good health. He began at that time to have vague, uneasy sensations in the abdomen, but never pain. He had slight tenderness about the caecum. The distress was such as to suggest appendix or gall-bladder trouble. Digestion poor. He had always been slightly constipated, but more so during the past three years. The stools were never formed, but described as "floculent," incomplete, and of very offensive odor. Patient had never had dysentery until October, 1913, when he began to have tenesmus, and frequent gelatinous stools containing a little blood.

I found abundant amoebae histolytica, and prescribed 1-⅓ gr. emetine hydrochloride, and enemas of 1/500 quinine bisulphate. After two or three treatments the dysentery subsided, and motile amoebae disappeared from the stools; but encysted forms were still present. This treatment was carried on daily with an occasional castor oil purge. With rest periods of two or three days the treatment was

(1) Craig: Parasitic Amoebae.
(2) Baermann und Heinmann: Muench. Med. Woch. May 27, 1913; June 3, 1913.

continued for several weeks, until all cysts had disappeared.

Result: Ten to fifteen pounds gain in weight, and marked improvement in digestion, with general sense of well being. Stools more normal than for the past three years. All amoebae had disappeared.

Amoebic dysentery is a misnomer, since many cases of entamoebic infection run a latent course, at least for a long time, without dysentery. In such cases the complaint is of vague, indefinite, abdominal symptoms, slight pain and soreness at some point of the colon, and some digestive disturbance. Stool examination makes the diagnosis clear.

Case 4.—Fireman, age 57. Residence, El Paso. Complains of uneasy feeling in the abdomen, and frequent gelatinous stools containing blood. First stool in morning normal. Appetite good. Sleep poor. Symptoms began three months ago with griping in the abdomen after eating or drinking, and slight dysentery, which had continued until the present time. He had had treatment with only temporary benefit. Patient was very anaemic and had lost much weight.

I found much swelling and infiltration of the rectal mucosa, upon attempting to pass the proctoscope, and suspected carcinoma of the rectum. But in the mucus swabbed away, I found abundant amoebae. The patient was sent to the hospital and given emetine hydrochloride, with quinine bisulphate enemas, as in the previous cases. The rectal infiltration and occasional passing of bloody mucus, continued for two weeks. The patient had 12 injections of emetine hydrochloride, in doses of 1-⅓ to 1-½ gr. He was occasionally a little nauseated but never vomited. The amoebae disappeared from the stools. He continued taking 10 gr. doses of ipecac at bed time, and quinine bisulphate enemas twice a week, for three weeks after leaving the hospital. Recovery complete.

I believe that, in order to best provide against the ever present possibility of a recurrence from unkilled, perhaps encysted amoebae in the tissue, it is best to give emetin in full doses, and quinine enemas three days in every fourteen for at least two months after the first three weeks of intensive treatment has been completed. It would be wise also to examine the stools at intervals for a year after the patient is apparently well.

(3) Ch. Dopter: Paris Medicale, November 1, 1913; March 14, 1914.

Strychnin and Caffein in Cardiovascular Disturbances.—Aided by a grant from the Council on Pharmacy and Chemistry, Dr. L. H. Newburgh has made a painstaking study of the action of strychnin and caffein on cardiovascular disturbances. He concludes that, since the blood-pressure is not low either in persons showing grave symptoms of pneumonia or of those dying from that disease, and since it has been proved that the vasomotor arcs are normal in animals after death from pneumonia, it is logical to conclude that the vasomotor mechanism is not impaired in pneumonia. Strychnin does not improve or augment the work of the heart in persons suffering from broken cardiac compensation. It could not be shown that either strychnin or caffein stimulated the cardiovascular apparatus in any of the conditions studied. (*Jour. A. M. A.*, July 25, 1914.)

CLINICAL ASPECTS OF BACILLARY DYSENTERY IN TEXAS.*

BY

J. G. BRYSON, M. D.,

BASTROP, TEXAS.

It is not my object to give a full treatise on the subject of bacillary dysentery, but to stress the fact that it exists to a considerable extent in Texas, a locality not frequently mentioned in literature.

Bacillary dysentery, according to text-books and popular clinicians, is a disease of the adult population of Japan and the Philippine Islands, but an infantile disease in temperate climates. I know from having found the Shiga bacillus, that the disease does exist in Texas, in both adults and infants. It has never been my experience to find a case in or near the period of adolescence. I have no reason to believe age has any influence upon the susceptibility of the individual, or the virus of the infection, yet all of the cases coming under my observation have been under 4 and over 20 years of age.

In 1898, Shiga, a Japanese observer, discovered and isolated a bacillus that was causing a specific diarrhoea in his country. Since that time there have been a number of different types of the same organism discovered and isolated. However numerous they are, they differ only in growth and agglutinating reaction. In the cases where I have examined the stools, twenty per cent have shown a bacillus resembling in morphology and staining reaction the Shiga bacillus. It is decolorized by Gram's stain and counterstained with carbol-fuchsin.

To locate the bacillus, take about two quarts of warm sterile water and wash out the lower bowel. After allowing about one-half of the return flow to escape, receive the remainder in a clean vessel. The reason for allowing the first part to escape is to get rid of the excess of fecal matter. After standing thirty or forty minutes, there will be a light flocculent precipitate. In this precipitate will be mucous, fecal matter some blood and flakes of the mucous membrane. The bacilli are disseminated throughout this material, but seem to be best obtained from one of the flakes pressed between two slides. The specimen is fixed by passing it through a smokeless flame a few times, then stained with Gram's stain. Examining, many different bacteria will be found, but when decolored with alcohol nearly or quite all of these will disappear. When you counterstained with some ordinary stain, say carbol-fuchsin, the bacillus

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of Shiga will be found—or we may assume so when we recall the condition of the patient from whom the specimen came.

The symptoms of bacillary dysentery are so characteristic that one can rely upon the clinical picture and not have to wait for the laboratory to make a diagnosis. They are: A sudden rise of temperature, from 102° to 106° F., in the first few days. The fever is continuous, resembling typhoid except in its more sudden rise at the beginning and the fall at the termination of the disease. There is pain over the abdomen, and especially over the area of the sigmoid flexure. This pain is not so severe at the beginning, but becomes more intense as the course of the disease advances. There are increasingly frequent stools, accompanied by pain and tenesmus. After the infection is well advanced the stools may number as high as thirty or forty in twenty-four hours. At first they are usually fecal matter with an excess of bile. Then they become mucous, bloody-mucous and muco-pus. Of course, there is always some fecal matter present, depending upon the diet and treatment. Near the termination of fatal cases, large strips of mucous membrane from the colon will be found, due to the extensive sloughing. The tongue has a heavy white coat over the entire surface. There is a loss of appetite and an extreme thirst. The urine is scanty, may show traces of albumen and always shows an excess of indican and some acetone. Tympanitis develops after the third or fourth day and is more stubborn in yielding to turpentine-stupes than the tympanitis of typhoid fever. The course of the disease is usually from twelve to thirty days, but may be longer and may even become chronic. However, the most severe cases I have observed have terminated in death during the second week.

In treating bacillary dysentery, we have to reckon with an infection of the lower bowel that produces many symptoms similar to typhoid fever. Hence, the treatment as to diet, rest and hygiene, is the same; but as to medicinal treatment, there are no two diseases with so great a difference. In bacillary dysentery the patient should be put to bed and kept absolutely quiet and comfortable. The bed pan should be substituted for the commode, and because of its frequent use it should be padded to avoid a sore. All the water that will be tolerated should be given; it will help to eliminate the toxins. The diet should be absolutely liquid, such as milk, albumen water or lemonade. If the patient is weak, egg-nog or sweetened toddy, may be given. Avoid all solid or irritating articles of food or anything that will leave an irritating residue in the bowel. As to medicines, in the early part of the disease the salines are paramount; either magneisum or sodium sulphate are good, preferably the magnesia. During the first few days they should be given in large doses and at frequent intervals; not that they have any specific action on the organism, but they flush out the irritating contents of the bowel, and as the greater amount of the infection is near the end of the bowel, they mechanically remove a great number of bacteria, thus avoiding the liberation of much toxic substance. I believe it is for this reason that opium and bismuth salts, as well as other astringents, given internally, have been of so little value in the treatment of real specific dysentery. Because of the fact that simple or catharrhal dysentery is so common and resembles bacillary dysentery so much during the first few days, I always give the following old prescription until at least twelve doses have been taken:

Tr. Opii (Deod.) }
Ac. Sulph. Arom. } aa f℥i.
Mag. Sulph. ℥i.
Syr. Zingib. qs. ad. f℥vi.
M. et sig: Take tablespoonful in water every three hours.

For adults and for children and infants, in proportion to age. This, I believe, will always have a quick and happy effect upon simple catarrhal dysentery, but will not affect specific dysentery at all. Therefore, when I am convinced that I am dealing with a case of bacillary dysentery, I stop the opiate, as it checks the secretions, inhibits elimination and aggravates the already present tympanitis. I push the salines vigorously for the next few days, until the amount of mucous in the stool has been greatly reduced. Bismuth may be given in large doses after the active infection is over, as it may coat and heal the irritated bowel. After the bowel has been thoroughly cleansed with salines, and the diet regulated as described, we are in a position to apply antiseptics directly to the seat of infection. To do this, the patient's hips should be elevated on the side of the bed, with an oil sheet or pad under him to drain the return flow into a vessel, and a sterilized soft rubber colon tube of medium size passed into the bowel very slowly, avoiding any force. If the tube meets with resistance, stop; and if the relaxation does not permit the tube to pass on, connect it with the syringe and let a small amount of the solution flow in, it will thus pass without any pain to the patient or injury to the inflamed bowel. When passed well into the bowel, let the solution flow with gentle pressure, and when the patient complains of fulness and discomfort, he should be instructed to strain and expel the excess of the fluid, all the while it is flowing in from the syringe. Repeat this as often as indicated during the active inflammation. It will be beneficial to use them every three or four hours, gradually decreasing as the active inflammation subsides. As to the solution, the simplest and least harm-

ful is warm saline solution. Any amount of this can be used with no fear as to its toxicity. Warm saturated solution of boric acid is just as safe, and in addition is a mild antiseptic and astringent. A solution of bichloride of mercury, 1-4000 or 5000, may be used. The most effective application I have used is a solution of silver nitrate, beginning with about 20 gr. to the quart of sterile warm water, and increasing the strength to 40 gr. to the quart. This is not only a decided antiseptic, but has a splendid tonic effect upon the mucous membrane of the iritated bowel.

This being an acute infection, treatment has to meet the symptoms. Tympanitis can be controlled with turpentine stupes. Nausea and vomiting can most always be controlled by keeping everything out of the stomach for a few hours. If this does not relieve, champagne, chipped ice or a mint julep, will often have a decided effect. For infants or small children, the juice of a pineapple on chipped ice, has a pleasant effect. After the first few days, most all cases need some form of stimulation. For this purpose, I usually use the alcoholic beverages when well borne. Tr. Strophanthus, in 3 to 6 minim doses, repeated every 3 hours while indicated, is helpful as a stimulant. Spartine sulphate, every four hours will usually be well borne and has a splendid effect upon the circulation, especially the renal, consequently acting as a mild diruetic. Hydrotherapy is the only means for reducing the temperature.

Prognosis is usually good. The disease may end abruptly after a course of from two to five weeks, or may become chronic and remain for days, or even years. The most severe cases I have observed have terminated in death during the second week.

EYE INJURIES.*

BY

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TEMPLE, TEXAS.

Injuries to the eye are of unusual interest to the laity and the medical profession on account of the delicate structure and important function of the organ, and on account of the fact that what appears to be a trivial injury may destroy the vision of the injured eye, and through sympathetic ophthalmia produce total blindness. Infected wounds in any locality are dangerous, as local infection may at any time become general; but when the eye wound is infected there is the additional danger of partial or total loss of sight.

*Read before the Section on Ophthalmology, Otology, Rhinology and Larnygology, State Medical Association of Texas, Houston, May 12, 1914.

Not long ago I was called in consultation by a most excellent practitioner to see a girl about 14 years old, who a few days before had complained of severe headache, so severe that the doctor was called at night to give relief. In a few hours after the onset of severe pain the patient had a hard chill and high temperature, then swelling of upper eyelid and protrusion of eyeball. I saw this case on the third day of the attack. The patient had three or four chills a day, with temperature ranging from 101 to 104 degrees between chills. The evidences of general infection were unmistakable. The right eye was greatly swollen and the upper lid was thick and greatly discolored. The patient was delirious, delirium having begun on the second day. Pain was so great that the hypodermic was required at short intervals to control the patient. The patient had ulcerating marginal blepharitis and had a stye on the upper lid a few days before this severe attack. The diagnosis in this case was cavernous sinus thrombosis as a result of infection coming either from the recent stye or from the marginal blepharitis. This case presented a text-book picture of cavernous sinus thrombosis and death occurred on the sixth day. I am reasonably sure that this death was caused primarily by an infection in the eyelid. I have seen a number of cases where infected and neglected injuries of the eyelids resulted in ugly deformities and impaired function.

While the lid injuries are capable of producing serious results, the injuries that give the most serious concern are wounds to the eyeball. In cases of severe injury, the question of immediate removal or an attempt to save the globe must be decided. It is a generally accepted fact that sympathetic ophthalmia will not develop within the first ten days following the injury. In consideration of this fact, it is my practice to make an attempt to save the globe, even in cases of severe injury, unless the injury is so extensive and of such a nature that enucleation or evisceration is plainly indicated at the time the patient comes for relief.

The importance of an injury to an eyeball depends on several conditions: First, the structures involved; second, the extent of the injury; third, the presence of a foreign body, its nature and chances of removal; fourth, the presence of infection and its character.

Perhaps nowhere is so much carelessness or incompetency seen as in the removal of foreign bodies from the cornea. And yet, nearly every one, even among the laity, considers himself competent to handle these cases. Considering their frequency and the lack of proper care, serious results are the exceptions. In order to successfully remove foreign bodies from the cornea, certain conditions and equipment must be

available. The operator should have clean hands and use only sterile instruments, and these instruments should be especially adapted to the work. He must have good light, a condensing lens and binocular loupe. The eye should be thoroughly cleansed and cocainized and the patient placed in a comfortable position with the head upon a firm headrest. The co-operation of the patient must be secured in maintaining the eye in a fixed position, inasmuch as a sudden movement of the eye while the foreign body is in contact with the cornea may produce a wound far more destructive to vision than that resulting from the foreign body itself. I have been called upon to treat many wounds resulting from clumsy attempts of inexperienced operators to remove foreign bodies. If proper illumination is not used, small foreign bodies may escape the detection of the examiner and remain in the substance of the cornea until they produce a local infection, with possibly disastrous results. I have known of pigment spots in the iris being mistaken for foreign bodies in the cornea and serious damage being done by attempts at removal. Such mistakes are easily avoided by using proper illumination. Attempts to remove foreign bodies from the cornea by the laity should be discouraged by the heads of departments of industrial institutions.

Another important point is the indiscriminate use of cocaine. It is a well-known fact that cocaine has a peculiar effect on the corneal epithelium. Repeated instillations cause a drying and exfoliation of the external layers, and even the entire thickness of the epithelium may be separated from Bowman's membrane. This shows the importance of using a minimum amount of cocaine, and it emphasizes the mistake of giving patients eye water containing cocaine to relieve pain. It is not an uncommon occurrence for a patient to come to the office with a badly infected ulcer (a lesion which if centrally located will destroy the sight), and give a history of having had a foreign body removed a few days previous, but as the eye continued painful cocaine solution had been procured from the druggist (and sometimes from the doctor) to give temporary relief until an oculist could be seen. Relief comes from the use of the drops, and the patient decides that it is not necessary to see an oculist or delays his visit on account of other duties; and in the meantime a condition is developing in the cornea which may destroy the sight of the injured eye and even, by secondary iridocyclitis, produce total blindness. On account of the frequency of the occurrence and the careless manner in which treatment is carried on, there is no class of eye injuries which is more important than minor injuries to the cornea.

After the corneal epithelium is broken, the eye should be thoroughly cleansed, argyrol instilled, and the eye protected from infection until the epithelium reforms. The absence or distortion of the light reflex in the cornea will usually differentiate a new lesion from an old scar. An ulcer covered with a gray exudate may, however, resemble an opacity produced by an old scar, but differentiation is quickly made by the use of fluorescin in 2 per cent. solution, which is of inestimable value in treating corneal injuries. A drop of this solution will stain the denuded cornea green and in this way outline the injured area. This solution is also valuable in deciding when a corneal injury has undergone repair, as the stain does not appear after the epithelium has reformed.

A bandage should never be applied to an eye in patients who have infected nasal ducts. The physician should invariably press the nasal sac, to see if infection is present. Such cases should be treated by the open method. The duct should be washed out with 10 per cent. argyrol solution and the patient put to bed; iced cloths should be applied, with instruction to change every two or four minutes, and argyrol should be instilled into the eye every fifteen minutes. I have seen many cases with extensive scars on the cornea and greatly reduced if not entire destruction of vision, who say the trouble was caused by neuralgia. I have no doubt that the real cause in many sueh cases was a neglected or mistreated corneal injury, which opinion is usually borne out by the presence of a corneal scar.

Aseptic wounds of the cornea and sclera are attended with little disturbance, even if they are perforating, provided the deeper structures are not injured. Unfortunately the vascular tunic is almost always involved. The average physician is particularly helpless in dealing with this class of cases. I wish, therefore, to call attention to certain symptoms which are significant of certain definite pathological changes, and upon which a prognosis can often be made. The vascular tunic includes the iris, ciliary body and choroid, and is called the uvea. Inasmuch as this tunic covers almost all of the inner surface of the eyeball, it rarely escapes when there is a perforating wound. The anterior portion of the uveal tract, the iris, is almost always involved when there is a perforation of the cornea. The most common and most difficult to treat are cases of prolapse of the iris. Recent cases of prolapse are recognized by their color and by the distortion of the pupil. Most cases appear black from the pigment of the posterior surface of the iris. Very soon the prolapsed iris becomes covered with an exudate and appears gray. If the iris is attached to the posterior portion of the corneal wound near

the pupillary area, atropine should be used with the hope of pulling the iris away from the cornea, while if the attachment is near the root of the iris, eserine should be used for the same purpose. If the iris is in the wound, it is seldom possible to replace it, and not often advisable to attempt it. Within 48 hours after the injury, excision of the iris is the proper treatment. After this time adhesions between the iris and the cornea are so firm that excision is almost impossible. In such cases a pressure bandage, until a flat scar has formed, is the proper treatment.

As an instance of the baneful effect of atropine when its use is contraindicated, I wish to cite the following case:

Case 1.—A man about 55 years of age presented himself April 8th, 1912, with a history of an injury in the eye, by a cotton boll, two weeks previous. His family physician had immediately used a medicine which dilated the pupil, and its use was continued under his direction three times a day up to the time the patient consulted me. The patient gave a history of intense pain in and around the eye, associated with almost constant fever and nausea. During the two weeks his stomach had returned practically everything taken by the mouth, and even when empty his nausea was still persistent. Inspection of the eye revealed a steamy cornea, anterior chamber shallow, pupil dilated, and a small portion of the root of the iris incarcerated in a corneal wound near the limbus. The condition of the cornea prevented a view of the fundus, which returned but a faint red reflex upon ophthalmoscopic examination. The tension of the eye was distinctly elevated, and a diagnosis of secondary glaucoma was made. A one-half of one per cent. solution of eserine was ordered, one drop to be used in the eye every half hour until the pupil became contracted, after which it was to be used every three hours. Sodium salicylate, grains 15, three times a day, after meals, was given to control associated iritis. The patient was depleted with calomel and saline cathartics. Almost immediate relief came from the use of the eserine, and the patient enjoyed his first restful sleep in two weeks. With the contraction of the pupil, the cornea promptly cleared, the anterior chamber regained its normal depth, the tension of the eye became normal, and the associated iritis disappeared. All the constitutional symptoms had disappeared within six hours. The eye was kept under the influence of eserine for twelve days, when it was deemed advisable to withdraw it for the purpose of knowing how the eye would behave. As suspected, with the disappearance of the effect of the miotic, there was an almost immediate return of the glaucoma, with all the constitutional symptoms which attended the first attack. The patient was told that his only hope for permanent comfort lay in an iridectomy, to which he submitted after three days. Immediate and permanent relief followed, and there has been no return of the symptoms. Vision without glasses was 20/20 for distance, and he was able to read Snellen 0.50 with a plus 2.50 lens. Had the use of atropine been continued, the loss of the eye would have been an assured fact, through pressure atrophy of the optic nerve. This case emphasizes the great responsibility borne by the practitioner who indiscriminately uses atropine in every eye which he undertakes to treat.

Omitting the cases in which the eye is lost from corneal ulceration, by far the greatest number of eyes are lost from involvement of the ciliary body, either from direct injury or by extension. It is of the utmost importance to the physician to be able to recognize, clinically, inflammation of the ciliary body, known as cyclitis; and, inasmuch as foreign bodies in the eye are a frequent cause of cyclitis, I can illustrate some of the symptoms by the following case:

Case 2.—A boy 12 years old was brought to the office for examination of the eye. He had complained of pain the day before, and home treatment had been used to relieve him. The boy stated that four days previous the eye had been red and had grown gradually worse. His vision was reduced to counting fingers at a distance of one foot. Inspection showed a wound in the cornea and iris, in the upper nasal quadrant. He was put to bed with a nurse in charge. The next day there was an exudate in the anterior chamber. An exudate could also be seen in the vitreous. A good oculist was called in consultation and gave a favorable prognosis. The boy was treated with atropine, dionin, hot applications and salicylates. At the end of a week the condition was worse, exudate constant and eyeball soft. The eye was removed and an examination of the enucleated eye revealed a shot. The boy confessed that he had been accidentally shot by a friend, but had kept silent because the fathers of the boys were not on good terms, and he feared that reporting the accident might bring on trouble. The case illustrates the type of symptoms which are always significant of degeneration of the eye; and, although the history was valueless, the clinical finding called for the removal of the eye, regardless of the fact that there was no suspicion of the presence of a foreign body.

It is generally admitted that an inflammation of the ciliary body must be attended by great pain. This is true of the acute variety; but the chronic form may go on to complete atrophy without pain. The case just referred to might be classed as a subacute cyclitis, with exudate in anterior and vitreous chambers. Any physician who treats or expects to treat injuries of the eye must know the symptoms of cyclitis. If there is no involvement of the ciliary body, the prognosis is good. If the ciliary body is injured or involved by extension, the prognosis is unfavorable. Pain and reduced vision are the only subjective symptoms of importance. Pain is present and severe in the acute form, but may be entirely absent in the subacute and chronic forms. The quantity of exudate thrown out determines the disturbance of vision.

The ojective symptoms are of much greater importance in diagnosing cyclitis. There is always, even in the very chronic cases, some ciliary congestion, and there may be tenderness on pressure. Tenderness may be elicited through the lid over the ciliary body. There is always an exudate. Exudates occur in five localities: First, in the ciliary body itself; sec-

ond, in the anterior chamber; third, on the posterior surface of the cornea in the form of dots or precipitates arranged in triangular form with the base downward and the apex toward the pupil; fourth, in the vitreous chamber; fifth, in the posterior chamber, which causes retraction of the iris with deepening of the anterior chamber.

Exudate in the anterior and posterior chambers and corneal precipitates, indicates inflammation of the anterior part of the ciliary body and does not necessarily mean loss of the eye. Exudate in the anterior portion of the vitreous can be seen with lateral illumination as a gray mass behind the lens, and indicates inflammation of the posterior portion of the ciliary body, which means a graver prognosis. The exudate seen through the pupil is sometimes mistaken by the inexperienced for cataract. Exudate in the vitreous and reduced tension, are symptoms that call for enucleation or evisceration.

The use of the *x*-ray in localizing, and the giant magnet for the removal of metallic bodies makes it possible to save some eyes that would otherwise be lost. I know of no work that so satisfies the oculist as the successful use of the giant magnet in extracting a foreign body from an eye. However, the final results are often disappointing, as the eye usually goes bad, from one cause or another. Infection is often carried into the eye by the foreign body, which results in one of the forms of irido-cyclitis; or the retina may become incarcerated in the scleral wound and through cicatricial contraction a detachment of the retina produced. This happened in the case of an 8-year-old boy who was recently injured in a peculiar manner. He was driving through the yard on a wagon when the hames of the horse's collar caught a wire clothesline, drew it taut as the horse advanced and finally broke it. On the rebound, one end of the wire struck the boy in the sclera, producing a perforation in the ciliary region. On account of the location of the wound, eserine should have been used in the eye to draw the iris as much as possible from the wound. On the contrary, however, atropine had been used during the ten days the boy remained under the care of his physician, and I found the root of the iris incarcerated in the scleral wound. I had the unusual satisfaction of being able to liberate the iris from the wound and the incarcerated portion was excised and the scleral wound covered with a conjunctival flap. The eye made what seemed to be a perfect recovery, but inspection after an interval of a few weeks, showed a very extensive retinal detachment, with complete abolition of sight.

One of the most favorable cases for the use of the giant magnet which has come under our observation was one in which we were not permitted to operate:

Case 3.—The patient came to the office and gave a history of having used a file as a cold chisel in driving a hoop off a beer keg, at which time something struck him in the eye. He was seen immediately after the injury by his physician, and was assured that there was no foreign body in the eye. The eye continued to be sensitive and was seen by us about three weeks after the injury. Vision was 20/20. There was a slight infection around the cornea. Inspection with the oblique illumination and the binocular loupe, revealed a very small opacity in the cornea near the limbus. The ophthalmoscope gave a good light reflex through the pupil and near the root of the iris was seen another light reflex, though a hole in the iris corresponding in size and position to the corneal scar. This was conclusive evidence that a foreign body had passed through the cornea and anterior chamber and iris. Inspection was then made with a dilated pupil and revealed a vitreous exudate attached to the ciliary body behind the wound in the iris. In this exudate could be seen a small metallic fragment which in its course had escaped injuring the lens. The patient was advised of the possibility of immediate removal of the foreign body with the giant magnet. He was a foreigner and we were not able to make him comprehend the importance of immediate action. His vision was still good and discomfort slight. Two days later he returned with a violent iridocyclitis and vision reduced to light perception, asking that the eye be saved by the removal of the foreign body. He was advised that such an attempt was useless, and that the eye should be immediately removed in order to safeguard the other eye against sympathetic inflammation. Our advice was again refused and he left our care, passing subsequently into the hands of another oculist, who removed the eye about three weeks after we last saw him.

From the fact that vision remained perfect for so long a period after the injury, we have every reason to suspect that this case would have terminated favorably had the foreign body been detected and removed immediately after injury.

ABSTRACT OF DISCUSSION.

Dr. R. H. T. Mann, Texarkana, said that once in a while an eye is lost from a cinder on the cornea, even when seen by a physician, and that it probably should not be lost. Where foreign bodies penetrate the globe of the eye, especially the vitreous, 35 per cent. are lost by infection; many more are lost from involving the vitreous, not by infection but by cicatricial bands, causing detachment of the retina. Where there is a wound of the lens sufficient to cause an increase of tension, and no infection, the lens should be evacuated at once. Where, however, the lens is sufficiently swollen to produce glaucoma and infection exists at the same time, one is in doubt whether or not to operate, for if an operation is not performed the eye may be lost from glaucoma, and if it is performed the infection may extend and the eye lost from infection. It is in just such cases that the greatest skill is required, to know just what to do.

Dr. C. P. Schenck, Temple, said: I have been impressed by the unusual power of recuperation shown by some injured eyes. As an example, I wish to refer to a case of traumatic iritis which resisted all treatment. Charcoal dust entering the

eye produced a corneal abrasion and the iritis was associated with the keratitis this produced. Lack of medical attention resulted in such firm synechiae that when a midriatic was used to the maximum no result whatever was obtained. The patient gave a negative Wassermann reaction, but in spite of this was saturated with antiluetic remedies without result. Neither did a saturation with antirheumatic remedies prove of benefit. In the presence of this degree of iritis the eye suffered further trauma through our attempt to do an iridectomy through a sclero-corneal trephine opening, done under local anesthesia. Resistance on the part of the patient made the iridectomy impossible, though the trephining was successful. The wound healed promptly, but the iritis continued unabated. Ten days later, under profound surgical anesthesia, an iridectomy was performed, upon the recommendation of Fuchs, who says that while the inflammation still exists, "we undertake an iridectomy only—as a last resort in order to put an end to the iritis when all other means have failed." A very prompt and complete subsidence of the iritis occurred, and now, after an interval of two months, the eye remains free from pain and inflammation.

In another case recently under observation, a boy plunged a stick through the cornea, producing a wound which extended through the pupillary area almost from limbus to limbus. The iris was lacerated and fragments extended into the corneal wound. The lens capsule was ruptured and the lens opaque and swollen when we saw him 24 hours after the injury. Under surgical anesthesia the extruding iris tags were excised and the lens fragments expressed, the iris placed in as good a position as possible with a spatula, and a conjunctival flap with a purse-string suture drawn completely over the cornea. Strange to say, the result is a firm union of the corneal wound and a comparatively quiet eye, though one which is not free from suspicion as a possible source of sympathetic ophthalmia.

Another case in which a large penetrating foreign body was removed from the eye by the giant magnet two hours after the injury, was discharged from treatment in two weeks with the eye free from inflammation, 20/20 vision, and only a small defect in the periphery of the visual field corresponding to the site of the injury just outside the ciliary zone.

I rehearse these cases in support of my statement that desperately injured eyes sometimes show remarkable recuperative power.

Glycothymoline Refused Recognition.—A report of the Council on Pharmacy and Chemistry cites glycothymoline as a typical illustration of a "patent medicine" advertised to the public through the doctors. Different formulas have been ascribed to glycothymoline by its promoters from time to time —but whatever the exact composition of this secret nostrum may be, it has been definitely shown that it is but a weak antiseptic solution. Nevertheless, the advertising circulars recommend the use of glycothymoline in such serious conditions as diphtheria and ophthalmia of the newborn. Glycothymoline is in conflict with Rules 1 and 4 of the Council on Pharmacy and Chemistry, because of its indefinite composition and the method of advertising it to the public. It is in conflict with Rules 10, 6 and 8, in that it is an unscientific, shot-gun mixture, sold under unwarranted therapeutic claims and under a misleading name. (*Jour. A. M. A.*, October 10, 1914).

A CASE OF BLEPHAROPLASTY UNDERTAKEN TO COVER AN EYEBALL EXPOSED FOR FOURTEEN YEARS.*

BY

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T. W., a negro, aged 22 years, an epileptic and uneducated, and a mathematical prodigy. When 8 years of age, in one of his fits, which he claims to have had each change of the moon from his earliest recollection, he fell into the fire and was burned over practically the whole left half of the face, from the hair line to the lower border of the jaw, which area became and is now a solid cicatrix. The outer surfaces of the left eyelid were burned so deeply that in healing there was eversion of both, complete in the upper and almost complete in the lower lid. The ciliary margin of the upper lid was retracted to a line just in front of the upper rim of the orbit, the hair follicles in both lid margins and in the eyebrow being nearly obliterated. Cicatricial bands drew the lower lid toward the ala of the nose and from that to the labial commissure in such a way that in working the lips, as in eating, it was subjected to tension downward. The lids being thus everted and retracted, the one up and the other down, the eyeball was left staring and prominent, and formed for it a background presenting a spectacle fearful to look upon.

In this condition the boy grew up, and the everted surfaces kept pace with his growth. As he said, "it made people sick to look at him." He was accustomed to wear a shield over the eye, and at night he slept with his left hand over it.

When he presented himself to me, the membrane of the upper lid was covered with a dirty yellowish crust, eczematous in appearance, which, when removed, showed a rough, bumpy surface not unlike that of an old trachoma. The lower lid seemed to be kept moist and fairly clean by the tears which flowed freely and constantly.

The eyeball was of full shape, the sclera white and normal and the cornea clear save for two white spots near its lower inner margin, the result, apparently, of a former ulceration. Though the pupil, iris, and media seemed normal there was complete loss of sight, not even light perception remaining. There was a strong sphincteric action in the orbicularis and the patient could with effort crowd the thickened

*Read before the Section on Ophthalmology, Otology, Rhinology and Larnygology, State Medical Association of Texas, Houston, May 13, 1914.

membranes about the ball, not sufficiently, however, to cover the cornea; at rest the eye was staring and exposed.

The cornea and all the parts were extremely sensitive, and the patient complained of constant pain and fever in the eye.

He was sent to me in December, 1913, though I had had previous knowledge of him. It was a question whether it would be best to enucleate and close in the orbit, or to try to form new lids and unite them over the eyeball. The latter plan was decided upon and the operation done on December 10th, 1913, under ether and with the assistance of my colleague, Dr. J. P. Hendrick.

The lower lid was first formed by the V-shaped incision of the Wharton Jones operation for ectropion, as illustrated on page 1423 of

Fig. 1. Showing results in the operation reported.

Woods' Ophthalmic Operations. Undermining the sides of the V and sewing together the lower half, making a Y of the V, forced up enough redundant skin to form a lid.

The upper lid was then shaped by Rollet's method, shown on page 1443 of the text mentioned, which consisted first of a transverse curved incision an eighth of an inch above what had been the ciliary margin, and extending nearly the whole width of the orbit. Dissection above, and retraction permitted inversion of the lid and left a space an inch vertically by about two inches transversely, to be filled in. Two half (or rather, quarter) moon shaped flaps were then formed from the skin of the forehead, above the inner and outer angles of the orbit, folded in and sewed to the ciliary margin below, to each other in the middle and to the upper margin of the incision above, making a very fair upper lid which would meet the lower loosely and freely over the eyeball.

The flaps were all of scar tissue, and realizing that consequent traction from above and below would likely finally nullify the effect of the operation, a tarsorraphy was done, the lids being sewed together for about two-thirds of their length, leaving free one-fourth of an inch at the outer, and one-half inch at the inner canthus, for drainage.

Strips of plaster transversely across the forehead and cheek, and obliquely and vertically over the eye, from forehead to cheek, were applied to minimize tension and were allowed to remain, some of them for ten days. Windows through the plaster were made over the inner and outer canthi, through which cleansing was done daily, and which were covered with boric gauze dressing. In two weeks healing, without a break anywhere, was complete, and the eyelids firmly united, as shown in the accompanying photograph. The patient was greatly relieved and has had no trouble since.

I regret exceedingly that I failed to have a picture made of the original condition, as the deformity was unusual and more extreme than is shown in cuts of similar cases in any of the works to which I have had access.

There seemed to me to be three circumstances justifying the presentation of this report. First, I found only one text-book out of five or more standard works in my library, giving with any completeness, description and details of treatment of like conditions. The fact that such extreme types of deformity are rare renders it the more important that those of us who chance to happen upon them should have some guide.

Second, the authorities examined, in suggesting measures for repair of such conditions, seem to advise the removal of all scar tissue and the formation of flaps from healthy skin. That, while highly desirable, of course, would have been impossible in this case. My incisions were all made through cicatricial tissue, and the flaps for the upper lid, particularly, were of thick and dense scar. But the blood supply from the under side was good and every stitch held, thanks to the supporting plaster.

Third, the length of time an eyeball could remain uncovered and exposed and yet retain its normal nutrition and appearance.

Vaccine and Serum in Hay-Fever.—A serum for the treatment of hay-fever is described in New and Nonofficial Remedies. Theoretically there can be no vaccine treatment of this disease for the reason that it is produced, not by bacteria, but by the pollen of various plants. The use of vaccines derived from the micro-organisms found in the nasal secretion are still in the experimental stage. (*Jour. A. M. A.*, July 25, 1914.)

THE TONSIL AS A CHRONIC INFECTIVE FOCUS.*

BY

HENRY B. DECHERD, A. M., M. D.,

DALLAS, TEXAS.

Only very recently has the tonsil been recognized as an important chronic focus of infection. Even at present, only a very few laryngologists appreciate its true status. Indeed, many tonsils, very innocent in appearance and so regarded by both patient and physicians, are far more important as chronic infective foci than the greatly enlarged tonsils, which are causes of naso-pharyngeal obstruction.

Within the last year or two much far-reaching and brilliant investigation has been made along this line. So numerous are the cases of arthritis, nephritis, endocarditis, etc., in which the tonsil has been found to be the causative factor, that both throat specialists and general practitioners are turning their attention more and more to the examination of the throat in all patients suffering from these and similar affections. The best work in America has been done in Chicago, by Shambaugh, Rosenow, Davis, Billings and others. As the result of their work and the work of other investigators, the so-called rheumatic diseases are now being classified in a more scientific manner.

It is now pretty well proven that usually in the child's second year, but often even earlier, the tonsil becomes a chronic infective focus, and so remains for the rest of its life, unless completely extirpated. To my mind this chronic inflammation cannot at all be explained as a concomitant of tooth development, nor as a result of any protective influence which the tonsils are supposed to exert. It is true that the teeth are developing in these early years, but the relation to the tonsil is only coincident. Indeed, every other portion of the child's body is likewise undergoing development and change. Again, because plasma cells are often found in tonsil tissue, it does not follow that this fact is of peculiar significance, because plasma cells are found in other tissues under similar condition of inflammation.

Be this as it may, it is certainly true that in nearly all young children the tonsil begins to cause trouble as early as the second year, beginning, of course, in frequent attacks of more or less acute manifestations. These are, to be sure, only acute exacerbations of a chronic condition; and hence are usually manifested in a general swelling of the tonsils, which returns in a short time to a so-called normal condition. In the acute infectious diseases of children there is almost invariably a preceding "sore throat." By some, this soreness is considered to be only an accompaniment of the disease; by others it is loked upon as the causative factor, or at least as the portal through which the infection has entered. A good example of this is scarlet fever, which just recently has practically been proven to be a streptococcic tonsilitis, with a bacteriemia or toxemia, which is responsible for the rash, fever, prostration, nephritis, etc.

Following closely upon these so-called acute attacks of tonsilitis, either mild, severe or malignant, there is established a condition of chronic inflammation of the organ. We have then what is ordinarily spoken of as a "weak throat." This means merely that there is present in the fauces a medium-sized, large or almost completely buried, tonsil which is the seat of infection with streptococcus, staphylococcus, pneumococcus, or other micro-organism. The resultant systemic manifestations of infection depend, of course, on the variety and virulence of the infecting germ. In the chronic conditions in which the joints, kidneys and heart are involved, it is usually found that certain forms of streptococcus can be isolated from the depths or base of this little gland. Furthermore, in numerous instances, it has been found possible where these germs have been isolated to inject them into guinea pigs or other animals and cause the same disease as the one from which the patient was suffering. Many of the worst forms of chronic arthritis deformans come under this classification. It was in this tonsil investigation that the Chicago men above mentioned discovered that it was possible to transform a streptococcus into a pneumococcus, and *vice versa*.

In some instances it has been found that true epileptiform convulsions have been immediately cured by removing a chronically infected tonsil. I have seen many cases of so-called rheumatic joints immediately clear up after tonsillectomy. I have had twelve cases of typical chorea in children immediately cured by this operation. To show that adenoids had very little to do with this disease, in two cases they were not removed until two or three months after the operation on the tonsils, yet the chorea had entirely disappeared.

I have had only two cases of endocarditis which could be traced to tonsilitis in children; but in both of these the operation established a cure. Two very interesting cases, which have occurred in my practice within the last few months, were of chronic parenchymatous nephritis with albumen and casts. The first was a boy of 18, who was suffering also from a bad case

*Read before the Section on Ophthalmology, Otology, Rhinology and Larnygology, State Medical Association of Texas, Houston, May 14, 1914.

of pustular acne. Both the nephritis and acne were cured in about two months after removal of the tonsils. The second case was a woman of 30, who had been suffering from nephritis for two or three years, with a slight edema of the lower extremities. She had been the rounds of doctors and watering places, but had obtained no relief until after removal of the tonsils. The albumen, which had been one gram to the liter, diminished in two weeks to one-half gram to the liter; in two more weeks to one-fourth gram to the liter, and in two more weeks to one-eighth gram to the liter. I fully expect that on the next examination the albumen will have disappeared completely.

Finally, a very, very common result of chronic infective tonsilitis is arterio-sclerosis. This is nearly always an accompaniment of old age, which could undoubtedly be put off a little longer by early removal of these chronic infective foci. Indeed, after many years of close and careful observation of thousands of throat patients, I have at last arrived at the conclusion that it would be no mistake to take nearly every child between the third and fifth year and extirpate the tonsils in capsule. At this age there is practically no danger; and the operation would be vastly more beneficial than such an operation as circumcision.

I fully realize that this radical stand will meet with the strong disapproval of operators who find tonsillectomy unsatisfactory to themselves and to their patients. As in all innovations, whether in medicine, civics, or in any other line, we must expect some opposition and criticism; but had we been content in the past to drift with the current of common opinion, humanity would have lost much of the progress already made, and the future would not, as now, be so bright with hope.†

SOME CLINICAL AND PATHOLOGICAL FINDINGS OF THE TONSIL.*

BY

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TEMPLE, TEXAS.

Some months ago we decided to make a routine examination of all tonsils operated on, and with this object in view we have taken the first one hundred cases without any selection. It is not our purpose to give a detailed report of each case, but rather to report them as a whole, with special reports of those of special interest.

The investigation develops that in the young subjects there is a preponderance of lymphoid tissue and in older persons a much greater quantity of connective tissue shows, as though by repeated attacks of tonsilitis the lymphoid tissue has been destroyed and connective tissue substituted for it. This is the reason the tonsils of adults are so much harder than those of small children.

A great many of the tonsils removed showed the presence of colloidal or cheesy masses, and not infrequently there was evidence of a small abscess cavity.

Out of the one hundred cases there were fourteen that showed giant cells, indicating a tuberculous condition. Of these only three were in children, notwithstanding a large per centage of the whole number were children. There was one case showing a leptothrix infection of the throat that will be referred to later.

The following of the series are illustrative:

Case 7.—Mr. C., age 40, had complained of a considerable irritation of the throat and great tendency to catch cold, but well nourished. Tonsils showed giant cells, and later we learned that this patient had been refused life insurance because of a history of fistula-in-ano, which was operated on some years before, with recovery. The findings of the tonsils justified somewhat the history of the case, which we were not in possession of at the time of the operation. This patient is in much better health since the tonsils were removed, and there is nothing like so great a tendency to catch cold.

Case 9.—Mrs. A., age 27, complained of a great deal of sore throat. The tonsils were removed and showed giant cells. Her husband reported to me a few weeks ago that she had been a great deal better since the tonsils were removed.

Case 10.—Mrs. G., age 30, complained of severe sore throat, but no ulceration of the tonsils, and not much enlargement. They were removed and showed giant cells. The patient continued to cough, and examination of sputum showed tuberculosis.

The patient has had rather a hard time since, with general pulmonary tuberculosis, and at one time came very near dying, but finally rallied, and her physician tells me that she has quit coughing, has no fever and has gained a great deal in weight. Her throat has given her practically no pain since recovery from the tonsil operation.

Case 21.—G., age 28, complained of having had sore throat for some time, with some fever. In addition to this, papules and indurated areas would come on the arms and legs, as if about to suppurate and then go away and others would appear, only to go through the same routine. This was a new development to her family physician, and we finally decided that it was erathema nodosum and had connection with the throat condition. The tonsils were enlarged and nodular. As soon as it seemed advisable, the tonsils were removed. Examination showed great excess of connective tissue.

Convalescence was decidedly unsatisfactory, the throat remaining sore much longer than usual and there was much loss of strength, as the patient could not eat or rest well. After about two weeks a bacteriological examination of a smear from the throat was made, which showed a leptothrix or veast fungus in great quantity. By applying to the throat a 50 per cent silver nitrate solution and actual cautery to the nodules, convalescence was rapid and uneventful. Her physician informs me that her general health is very much better. I might state here

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†Discussed with the following paper.

for the benefit of those not familiar with erathema nodosum, that it may be caused by leptothrix.

Case 48.—Mr. L., age 45, large and fleshy, complained of persistent cough. Had enlarged tonsils and some sore throat. The tonsils were removed and giant cells found. Convalescence was uneventful; cough relieved.

Giant cells do not mean absolutely that the host is tuberculous, but are characteristic of tuberculous inflammation. In some instances in this series their presence has borne out other clinical history, and in the whole series 14 per cent showed giant cells; eleven of the fourteen were in adults.

These patients complained of a number of symptoms, but the ease with which they caught cold was the most frequent complaint. The results of the operation have rarely been disappointing.

Before closing I want to say just a word or two about the technique of the operation. All the children and some of the adults, were operated under ether, local anesthesia being resorted to in some of the adults. Bimurate of quinine and urea were used in other local anesthesia, and with fairly satisfactory results. The operation was done with blunt dissection and cold snare.

I think a most important feature is the control of hemorrhage. Following removal of the first tonsil hemorrhage should be stopped before starting with the second. This a I have been able to do quite satisfactorily by pressure, and have not had to ligate any vessels. The second tonsil may then be removed and the hemorrhage stopped again before going ahead with the adenoids.

Since following this routine I have had no uneasiness after the patient has left the table. I find it much easier to control hemorrhage with the patient asleep than otherwise, and for that reason I have come to regard the tonsil operation more and more a hospital case.

ABSTRACTS OF DISCUSSION.

Dr. Edgar H. Vaughn of Tyler, does not believe with Dr. Decherd that all tonsils should be removed, whether diseased or not diseased. He believes, however, that when needed the whole tonsil should be removed; that is tonsillectomy.

Dr. T. W. Crowder of Sherman, takes a middle ground. He does not remove a tonsil unless it is diseased and there is evidence of harmful absorption of toxins.

Dr. L. H. Lanier of Texarkana, does not believe in tonsillotomy. He thinks the danger is limited only by the capsule, the crypts extending clear through.

Dr. R. H. T. Mann of Texarkana, said we should look at this matter from every viewpoint. He thinks many tonsils are removed when they should not be removed and many left when they should be taken out.

Dr. Crittenden Joyes, Fort Worth, said he was glad that the essayist admitted that there might be some few cases in which it would be allowable to leave the tonsils after they had reached the age of 3 to 5 years. He wanted a few of them left so he could tell them they could keep them. Years ago, Jacobi called attention to the fact that while the diphtheritic membrane was confined to the tonsil there was very rarely enlargement of the cervical glands, but the minute the membrane spread to the other parts we had swelling. This would indicate that the tonsils are not after all such a menace to the system through possible infection. He holds that the removal of adenoids frequently causes a reduction in the size of enlarged tonsils, but that the removal of the tonsil has no such effect on adenoids. He considers the tonsil a differentiated lymphatic gland, and says that he invariably has more trouble in the after treatment of nasal operations in patients without tonsils, than those with tonsils, and that the total removal of the tonsil, even at the hands of the most skillful operators, is bound to injure the speaking and singing voice.

He believes with the essayist that rheumatism frequently originates in the tonsils, but thinks a tonsillotomy will do as much good in most instances, as a complete extirpation, and he believes quinsy can be as well prevented by incisions in and excisions of the upper lobe as by extirpation, as he has seen quinsy of the tonsillar pillars following removal of tonsils.

Dr. Decherd, closing, said that he does not believe the tonsils will ever be taken out in all children, but that it would be well if they were. Sometimes we get far in advance of the age in our reforms, and get soundly criticised by those whose ignorance is their main characteristic.

FLAT FOOT.*

BY

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Flat foot is an acquired valgus and is understood to be a faulty condition of the foot, impairing its weight-bearing strength. The importance of this condition and the fact that it is, in the majority of instances, not congenital but acquired, puts it in a class by itself as a static-plano valgus, which requires special treatment.

The human foot normally changes shape as the superimposed body weight is shifted in different static positions incident to human action. The normal check to excessive outward twist is in the locking of the mid-tarsal bones as the weight falls on the outer edge of the foot, giving a firm base of support. There is no such protection on the inward rotation, which is limited by the ligaments and the muscles, so that, when there is too constant twisting of the mid-tarsus, a condition of chronic strain follows which leads to ligament irritation, allowing abnormal position of the tarsal bones and resulting in flattening of the arch. This movement is normal up to a certain point, but beyond this it becomes pathological and is attended by symptoms of pain and disability. Strictly

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speaking, this is a mid-tarsal drop or twisting beyond normal limits.

The movement is a combination of inward rolling and dropping of the inside of the middle of the foot; the patient stands with the front of the foot turned out to give a wider base of support. The internal malleoli assume an unduly prominent position and may be termed knock-ankle. If this is allowed to continue we will have, according to Wolf's well known law, an alteration in the shape of the bones from loss of ligamentous support and pressure; the scaphoid and cuboid are especially dislocated and changed in shape, the tibialis is weakened, the peronei contracted, the plantar ligaments are stretched and displaced and those bearing strain are thickened. This being a static condition, it may be said that the deformity is caused by a disproportion between the weight borne and the muscle power to withstand the strain.

Faulty footwear is a prolific cause of flat foot. Stevens suggests, and I believe he is correct, that heels should not be worn, and that the shank of the shoe had better be filled in solid, giving a uniform support to the bottom of the foot. This would be especially valuable as a preventive measure. A faulty position in standing or walking, and anything that tends to weaken the muscles of the legs and feet, are exciting causes; Pott's disease, fracture and chronic arthritis of the ankle are sometimes responsible for the condition. Tuberculous disease is credited with being a cause, but I doubt if it is ever a factor contributing to the development of this disease.

There are two grades of flat foot, the flexible or weakened, where there is little or no structural change, and the foot appears normal at rest, but becomes flattened when weight is put upon it, and flat foot proper, the rigid, in which the distortion is permanent and with more or less structural change in ligaments or bone.

The deformity is apparent from the loss of the arch of the foot, which may be so destroyed that it comes in contact with the ground. The first symptom complained of is the discomfort of the feet after walking or standing. This pain usually subsides when the superimposed weight is removed, but may continue after the foot is put to rest; the pain may be referred to the hip, knee or leg. Tenderness over points of ligament strain, muscular spasm and swelling of the foot, usually are symptoms. The stiffness of the foot prevents its being adducted actively or passively, which interferes with the assumption of a correct position by voluntary muscular effort until proper flexibility is restored.

In arriving at a conclusion as to the condition present, the x-ray is of the greatest value and should be used in the study of all cases if available. It exposes the position of the bones and shows bad formation, exostoses, foreign bodies, fractures and malposition. The radiograph should always be made with the foot at rest and with weight imposed. Baisch has shown that with the weight bearing, in the normal foot, there is a drawing together of the tarsal and metatarsal bones, while in flat foot there is a separation of these bones.

The correction of flat foot resolves itself into the replacement of the displaced tarsal bones, overcoming mid-tarsal stiffness, and restoration of the muscular strength needed to sustain the body weight. Strengthening the muscles is accomplished by the untrammeled use of the foot in the main, and a great many exercises can be used to advantage, but in resistant cases it is necessary to correct mid-tarsal stiffness by mechanical means. This is usually facilitated by the use of an anesthetic when the bones are forced into position and put up in a plaster cast, which should be worn for some weeks, or until the patient can bear the use of proper support. Local anesthesia is used with satisfaction by some, but personally I prefer general anesthesia.

There is a condition known as inflammatory flat foot that is often diagnosed and treated as rheumatism. The only resemblance they bear to each other is that both are painful. There may be a severe degree of inflammatory flat foot with but little apparent deformity. If the patient has rheumatism in no other part of the body, it is hardly probable that it will exist permanently in the feet alone. If the condition is flat foot, the tender points on the inner side of the foot and frequently just in front of the outer malleolus, and more or less giving down of the arch, will usually establish the diagnosis.

The proper fitting of a plate is of the greatest importance. A patient should not be sent to a shoe house to buy a plate or arch support, any more than he should be sent to a spectacle vendor for glasses to correct a defective eye. If the arch is not fitted for that special foot, it may do much more harm than good; then the too constant use of the arch, even though it fits, will result in harm. The plate should be regarded in the same light as a crutch, and be discarded as soon as the foot is able to bear the strain and irritability has disappeared. Should the plate be continued, the muscular development is hindered and the foot fails to recover a normal degree of strength. Properly adjusted pads in many cases are far more effective than are plates, because of the freedom allowed in motion, which is essential to the restoration of the normal tone of the soft parts. To make a plate fit, a mold of plaster or dental wax should be made of the foot, and the support made to fit this mold accurately. Doctor

Geist, of Minnesota, uses a combination of Lange and Whitman brace made of celluloid over plaster cast model, with the external flange to prevent the foot from slipping off the brace. It is light, distributes the weight properly, retains its position, and is most desirable. One should be sure of its removal when the indications for further use have disappeared.

Other conditions may be mistaken for flat foot. Brandenstein reports three cases of intermittent claudication in men past forty, which were treated as flat foot by the use of arches. The support aggravated the disturbance, as it impeded the already embarrassed circulation. When measures were used to improve the circulation, the condition markedly improved and all pain was relieved. In a combination of arterio-sclerotic intermittent claudication and flat foot, the trouble is generally attributed to flat foot alone, while the more serious vascular affliction is overlooked or regarded as in no way responsible.

Varicose veins interfere with the nutrition of the muscles and are not infrequently at the bottom of the weak and painful foot. It is essential that these veins be attended to and topical applications made to restore the foot to a normal condition.

Special stress is laid on the necessity of being on the lookout for flat feet in men over forty years of age. In the Army, of every one thousand examined, 74.5 are excluded on account of imperfect physique, and of these an astonishing percentage is because of defective feet. The efficiency of an army depends upon the efficiency of its soldiers. If a soldier has a pair of defective feet, he becomes a handicap rather than an asset. Wonderful progress has been made in Army circles in the care of the feet. The proper shape for shoes has about been worked out, and for some time special attention has been given to the matter of posture and gait, which are a prolific source of flat and weak feet. Here, as in all other anatomic and pathologic departures, the one thing to be desired is to determine the cause. This can be done only by persistent effort and the free use of all the means of diagnosis at our command.

Phecolates, Phecolax, Phecozymes and Phecotones.—These are tablets put out by F. Waldo Whitney designed to form part of a system of treatment founded on the theory of autotoxemia. The different mixtures consist in the main of well known remedies, one of them containing ten constituents. Most extravagant claims are made for these mixtures. The Council on Pharmacy and Chemistry voted to refuse them recognition as unscientific shotgun mixtures and because the names do not indicate their potent constituents. (*Jour. A. M. A.*, November 21, 1914).

PSYCHOTHERAPY.*

BY

JAMES GREENWOOD, M. D.,

HOUSTON, TEXAS.

During the last few years much has been written on this subject and many new theories advanced, some of which have provoked widespread discussion. Bacteriology has made such advances in the matter of cause, and surgery and serum therapy in the matter of treatment, that the psychic element is liable to be overlooked. Psychotherapy appeals to most physicians as something of value when there is really nothing the matter with the patient. Yet it is a remedy of value, capable of curing many serious nervous diseases and often proving of great help in other conditions. It is as rational in its application as either surgery or medicines proper. To understand the use of psychotherapy, one must understand disease in all of its various manifestations. It is just as great a mistake to treat a case requiring surgical attention by psychotherapy as it is to treat a case needing psychotherapy by surgery. It is very important, then, that a correct diagnosis be made. It is also often the case that both are needed, or some other form of treatment combined with psychotherapy, and it is the combination that gets results.

Besides the material causes of disease, such as bacteria, trauma, dietetic errors, etc., we have others of great importance, such as worry, emotions of sorrow, fear, love, etc., which undoubtly play a big part in the production of nervous diseases. Business worries, losses, panics, sickness in the family, strain, lack of sleep, disappointment in love, in people we like, and all such things, are just as real as the cause of disease as are the more material ones. They act on cerebral cells and bring about certain changes in them. Crile has shown that fear in a rabbit can bring about demonstrable changes in these cells. These things not only do this but act on other organs and functions, such as appetite, digestion, action of the bowels, blood pressure, etc. It is when the general condition is below par from some other disease that these things have the greatest effect, and in people past middle age they may play a very prominent part in producing death.

Psychotherapy is to me a means of removing fear, giving hope and stopping worry. Rational psychotherapy is not so much a matter of suggestion as it is a statement of fact, which you try to instill into your patient and which he believes, according to his confidence in you and your ability. It has always seemed to me the

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height of folly to treat a real pain by psychotherapy, but when we have a patient who greatly magnifies the sensation of pain, psychotherapy is of much aid. Suggestion is a statement, such as "you are not sick," "you have no pain," or the administration of a placebo with the statement, "this medicine will cure you." Rational psychotherapy would contemplate a careful examination of the patient, then the statement that all of his organs are in perfect condition, if they are, and that there could be nothing serious the matter with him, if there isn't. Now, then, if he is complaining he is malingering, has an imaginary trouble, exaggerates some slight trouble or really feels badly. If he feels badly he needs something, but the careful examination and the statement "that there is nothing serious the matter, does much good. Then the patient may need some medicine, rest, a trip, a general tonic, which, with the removal of his worry, will soon get him well again. I remember on several occasions feeling out of sorts and thinking I must be real sick, when the use of the thermometer made me feel much better, and convinced me there was nothing wrong.

Malingering is rather common, for in many people there is something to be gained in this way. Children get pleasure out of being sick, for then they are the center of attraction, are petted, get presents and get to stay away from school. I have seen children grow into complete invalids where this was the main cause, and only when they are removed from the hope of these pleasures will they get well. These things make deep impressions at this impressionable age and are felt through life, which explains many nervous symptoms met with. These patients need new environment, and this is where a careful examination and a rational explanation, combined with proper exercise, sleep, massage and tonics, will effect a cure. The psychotherapy in these cases is to explain, encourage, get new ideas into the heads of the patients, awaken ambition and wean them away from old ideas. For imaginary troubles and exaggeration of slight ones, the same treatment holds good.

Suggestion and auto-suggestion are often the cause of distressing symptoms. No doubt, the reading of patent medicine almanacs, testimonials and advertisements, have produced symptoms in millions of people, and have changed slight symptoms into a firm belief in serious trouble. This suggestion plays a big part in the production of symptoms, and belief in disease thus created is the greatest asset of the patent medicine vendor. It is interesting to note how deeply these false ideas sink into the conciousness of a patient and how hard it is to eradicate them. Auto-suggestion is the self suggesting of certain diseases, as an explanation of certain symptoms. A patient of mine, a young man, read something about softening of the brain. About six months later, having had a good deal of trouble, and thinking more and more about what he had read, it became a fixed belief with him that he had that disease (whatever it is) and it was very hard to eradicate.

It seems to me that with worry and especially mental conflict, such as a strong desire to do something to which conscience and duty are opposed, a condition of great susceptibility to suggestion is produced, and at such times morbid ideas often act as a suggestion until they become fixed on the mind. Every year I see many patients whose thoughts are the source of much worry. They realize that they cannot help having them, and they get the idea that they must be going crazy. Sometimes the thoughts of which they complain are repulsive or thoughts which the patient wishes to forget, or there is some foolish idea which the patient knows is not true and yet it comes up again and again. In such conditions the thoughts are somewhat similar to dreams. They are certainly as far from the control of the patient as dreams are, and are often due to some memory which is unpleasant, or associated with the mental conflict which I have mentioned. This kind of an explanation is of the greatest help to these patients. They will realize that they are not to be blamed for evil thoughts, or they will understand them better and not worry over going crazy. The impression should be made to prevail that these thoughts will pass away just like dreams and that no attention is to be paid them. One patient of mine had bitter thoughts against his parents and at the same time he knew they were erroneous. He could not understand why he had them. A study of his past life revealed a love affair, which his parents were strongly opposed to and concerning which he still felt bad. Suitable explanation soon relieved him and he went back home happy and as devoted as ever to his parents. It is the explaining, the assurance that they are not losing their minds and that they will soon be well (and this is true,) that will eventually relieve such patients as these.

In the treatment it is necessary to make an individual study of each case. No two are alike. The condition of all the organs must be determined, the symptoms of which the patient complains of studied, his ideas, life, peculiarities, feelings, emotions, unpleasant experiences, regrets, worries, etc, looked into, according to their probable bearing on the trouble. We must understand our patient, so as to know what to say to help him. In many cases it is necessary to know and treat some other members of the family, in order to remove the real source of the trouble. It may or may not be best to go into their troubles, discuss them and in that

way try to help them. In most cases removal from relatives is necessary. They get too much sympathy and often that is all that is needed to keep up their condition and prevent them from trying to get well. Often they need to make effort and they won't do it at home. Many of these patients need new ideas, a new insight in life. Many are selfish, self centered and must be taught to care for others, think about helping others and realize that they have duties to perform. Often if they will freely confess what it is that worries them or what they have done that they regret, they will get great relief. Many of them must be reeducated. A routine life is often of much value, for it is a method of breaking bad habits and developing good ones. Often firmness is needed, they know we are right, do as we ask and feel better for it. We break the power of morbid, emotional selfish control. Sometimes they should be told plainly what they are and what their faults are, at the same time they should know that we want to help them. We must get their minds off themselves, tell them to quit noticing their symptoms and above all quit talking about them. Some people talk about symptoms because that is all they have worth talking about. It is a way of calling attention to themselves. I believe this is very important in the matter of perpetuating symptoms. Often, after a time, I tell these patients that I am familiar with their case, and want them to keep from telling me anything about their symptoms for a week. If they can keep from saying anything about themselves for that long they will get over that desire to talk about themselves which is keeping up their symptoms.

There are different systems of psychotherapy but in my opinion there should be none, just as there should be no systems of medicine. Different methods are useful in different cases. Hypnotism, suggestion, persuasion, psychanalysis, are all of use at times. Some physicians can use one better than others, but the method used should be dependent on the individual to be treated, rather than the preference of the physician. Other treatment should be used when needed, baths, massage, exercise, diet or medicines.

A paper on psychotherapy would be incomplete without some reference to the work of Freud and psychanalysis. In my opinion there is some truth in Freud's ideas of psychology, and the etiology of many nervous diseases. That there is often some unpleasant idea at the bottom of nervous disease, especially hysteria, I think is correct. I believe he places entirely too much stress on the sexual. which is an unpleasant subject to discuss with many patients, and capable of doing them harm. Many of our best neurologists are opposed to his ideas. In his writings and those of his school, there are many inconsistencies, and one cannot help feeling skeptical. It is true that they get results in many cases, but they are often selected cases, and they admit it may take a year or two in many cases to get results. Still, his writings and the writings of Brill, have been useful to me in helping me to understand my patients.

In conclusion, I wish to call attention to the fact that the symptoms in many serious diseases are often similar to those found in simple functional diseases, and to treat all of them by psychotherapy is bad practice. A patient with brain tumor may be hysterical, and one should be careful not to make the mistake of thinking the whole trouble is hysteria. I believe the diagnosis of hysteria, neurasthenia and other functional diseases, should be made only after a careful examination of the patient. Even then there must be some doubt of the diagnosis for a time.

REPORT OF CASES.*

BY

J. B. SHELMIRE, M. D.,

DALLAS, TEXAS.

During the past few years a number of rare cases have come under my observation, and I am pleased to take this opportunity of presenting several of them. With but one exception the reports are accompanied by photographs, which enable me to present them briefly.

ORTHOFORM DERMATITIS.

In July, 1913, a woman 65 years of age came with a history of a long-standing and severe pruritus vulvae. A 10 per cent. orthoform salve was given. On the following morning she telephoned to thank me for the relief which it had given her the previous night. Forty-eight hours after the application she appeared at my office with the beginning of an active and severe dermatitis of the vulvae. This, after a few days, extended downward over the inner surface of the thighs and upwards over the buttocks. The attack passed in ten days. The pruritus returning, she made a second application. Five days later, I was called and discovered that a dermatitis beginning 24 hours after the application had extended to the knees and over buttocks to near the middle of the back. Knowing there was either something wrong with the salve or that the patient possessed an idiosyncrasy against orthoform, I applied it to the arms of three of the family, to the druggist who prepared it and also over a small area of my own left forearm. No irritation followed any of these applications except

*Read before the Section on Medicine and Diseases of Children. State Medical Association of Texas, Houston, May 13, 1914.

in my own case. Twenty-four hours after the application to my own arm a dermatitis appeared, which spread until the arm from shoulder to fingertips was affected. In many places there were blisters, some of them becoming confluent, forming bullae. The inflammatory process was severe and caused the arm to swell considerably. It was six weeks before resolution fully took place. The suffering from this orthoform dermatitis was as painful as that from a burn. The old lady was confined to her bed for two weeks in consequence of it and was not able to leave the house for four weeks. That both the patient and her physician should possess the same idiosyncrasy was a startling and painful discovery.

MULTIPLE NON-PIGMENTED SARCOMA.

From both the clinical and the pathological standpoints, I was not certain in which class to place this case. According to Pusey it was

FIG. 1. Multiple non-pigmented sarcoma.

multiple non-pigmented sarcoma; according to Stelwagon, pigmented or melanotic sarcoma. Dr. Black, the pathologist, first considered it to be of the pigmented class. After further study of sections he pronounced it of the non-pigmented variety. There was no history of a pigmented spot or mole to indicate that it might be a melanotic sarcoma.

The patient was a male, 20 years of age. He came to the hospital April 27th, 1913. Four months previously, he noticed a purplish growth on the extensor surface of the right forearm. A month later, numerous similar growths appeared on the extremities and a few on the body. When seen, there were many growths ranging in color from red to dark purple, and varying in size from a pea to a walnut. They were very numerous on the extremities, being confluent in places. There were a few scattered over the body, mostly on the back. The legs below the knees were much enlarged. The patient had lost twenty-five pounds in weight and was very weak, with a temperature of 102°, and a pulse of 90. The original tumor had ulcerated, as had a few others. Necrosis had occurred in these ulcerated lesions, resulting in an offensive odor. He grew rapidly worse, as general sarcomatosis had taken place, and died May 5th, 1913, less than five months from the beginning of the trouble.

Pusey states that from this variety of sarcoma the patient dies from within a few weeks to one or two years.

MULTIPLE NEURITIS FROM ARSENICAL PASTE.

Multiple neuritis from the ingestion of arsenic is not infrequent. Many cases, both mild and fatal, are on record, but I have not found in the literature the report of a single fatal case from its local application. It has been three years since this case was observed. Dr.

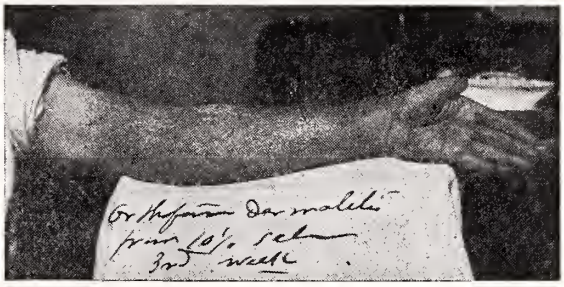


FIG. 2. Multiple neuritis from arsenical paste.

Joseph Grindon of St. Louis, wrote me that he had searched the literature from 1896 to 1905 without finding any cases reported except from internal use of arsenic. Dr. A. R. Robinson of New York, an acknowledged authority on the treatment of cancers with arsenical paste, and a physician of large experience along this line, stated in a letter to me that in his thirty years' experience he had had two cases of multiple neuritis in a mild form following the application of paste over large areas.

J. H. Crowe, age 42 years, a strong, well-built man, laborer by occupation, came for treatment in July, 1911. Except for a cancerous growth on the left temple, he enjoyed good health. There were no evidences of disease of internal organs. The heart and kidneys were found to be normal. Over the left temple there was a superficial, ulcerating epithelioma, the size of a half dollar. On July 2nd the lesion was curetted and a paste of equal parts arsenious acid and orthoform was applied. At

the end of 18 hours the paste was removed. At the expiration of 48 hours there was the usual reaction. The patient seemed a little depressed; pulse 100, temperature normal. There was no nausea, vomiting or diarrhoea. In fact, there were none of the symptoms of acute arsenical poisoning. The urine was normal, showing that the kidneys had not been affected.

On July 6th the patient complained of a peculiar tingling sensation in the hands. On the 8th he said this sensation had increased and there was a numbness in the fingers also. These symptoms persisted and soon there was slight paralysis of the muscles of the forearm. At this time he was up and about the ward, sleeping well and with good appetite. The temperature was normal, but the pulse was slightly accelerated. July 12th the same tingling and numbness attacked his feet. There were no pains except on pressure. The muscles of the lower limbs began evincing paralysis. The paralysis of the arms and legs was progressive. By July 16th the patella reflexes were lost and the patient could neither feed himself nor walk without assistance. The bowel movements were normal, kidneys remained intact and there was no bladder disturbance. About the time the nervous symptoms first developed there was a conjunctivitis of the eye nearest the lesion. About the 15th there were two or more trophic ulcers, involving the conjunctiva and cornea of each eye. The patient left the hospital for his home on July 21st, nineteen days after the operation. On that morning the pulse and temperature were normal. Temperature had never been above 100°.

There was almost complete paralysis of the upper and lower extremities. At this time there was no evidence of paralysis of the trunk or head. The appetite was good, bowels moved daily, and the kidneys and bladder were still unaffected. Dr. Blythe of Mt. Pleasant wrote me that the patient grew rapidly worse after reaching home. The paralysis increased, involving the muscles of the trunk and head. On August 3rd he found him unconscious, with a temperature of 102°, which increased to 105° on August 5th, on which day he died.

Drs. Baird, Reeves and Black, saw the patient during his illness and concurred in the diagnosis of multiple neuritis.

XERODERMA PIGMENTOSUM.

This rare disease was unknown until described by Kaposi in 1870. Since then more than a hundred cases have been reported.

O. W., age 5 years, came to me in May, 1911. Family history negative. When six months old, his mother noticed spots on the cheek, which she mistook for freckles. As the child grew older, these spots increased in size and number, also appearing on the limbs and body. Since 3 years of age there have been several warty growths on the face, which have sloughed and healed. The father says there was an offensive odor during this process. The child was well nourished and of average size for his age. Mentally he was dull. The pigmented spots were scattered over the entire body, the palms and soles alone escaping. There were very few about the genitals and inner surface of the thighs. They were larger and more numerous on exposed surfaces.

At the time of his visit there was but one warty growth and that was on the upper part of the nose. There were a few telangiectases on the face, more marked on the left side of the

Fig. 3. Xeroderma pigmentosum.

nose. There were numerous small white cicatricial spots on the hands and feet. The skin of the face was somewhat atrophic. This atrophic process was most marked about the nose, mouth, and lower lids. There was decided ectropion of the right eye. The contraction about the mouth was such that it could be only partially opened. There was such atrophy and contraction of the nose that the nares were nearly closed. Almost the entire surface of the nose looked cicatricial. The photograph gives a clear impression of the condition. The pigmented spots, the wart, the small white atrophic spots and the cicatricial conditions about the

nose, are plainly shown. A recent letter from his physician states that he is living and has cancerous growths on the face.

LEPROSY.

Mr. A. R., age 58, was born in Kentucky, reared in Ohio and lived in Texas many years. Was seen first in April of this year.

Fig. 4. Leprosy.

Macular lesions appeared ten years ago. Rhinitis developed three years ago. About two years ago the cartilage at the lower part of the bridge of the nose was destroyed, causing a depression. Following this, the alae became much thickened. About this time atrophic changes occurred on many parts of body. At the present writing the eyelashes have been destroyed, the skin of the hands, especially of the fingers, show atrophic changes in a thinning of the tissues and in ulcerations. The finger and toe nails are either partially or totally gone. Both ulner nerves are much thickened. The fingers remain fairly supple, but the toes are stiff and contracted. The lobes of the ears show evidence of the tubercular type, being decidedly thickened. There is some ulceration on the hard palate, and the patient has a raucous voice from involvement of the vocal chords. There are ulcers, pigmented areas and areas of scar tissue scattered over the body. There are two or more atrophic ulcers on each plantar surface. There is almost complete anesthesia about the feet and hands, lobes of ears and pigmented areas on the limbs and body. There is no sensation of pain when specimens are removed for examination. Thermo-anesthesia is also marked. The lepra bacillus has been demonstrated several times in secretion from the ulcers.

DERMATITIS VENENATA.

Miss A., age 25 years, had an abdominal section May 10, 1913. Preceding the operation, iodine was painted on a large portion of the abdomen. The patient says that on the following day she experienced a burning sensation over the abdomen, which has continued to the present time. After the operation, a dry dressing was applied. The surgeon who removed the

Fig. 5. Dermatitis venanata.

dressing on the tenth day did not notice an eruption. Dry dressing was applied again. Returning to her home, she removed the dressing on the eighteenth day after the operation and saw the abdomen for the first time. She states

that the eruption then was as it appeared when she came under my care, December 13th, 1913, seven months after the operation.

There was decided hypertrophy of the scar along the line of incision. The abdomen over the region painted with iodine showed a decided redness, which paled some under pressure. The surface was warmer to the touch than normal skin. The patient complained of a continuous burning pain and would flinch at the slightest touch. She could not wear close-fitting garments over this region. On the sides there were a few isolated spots of redness. Up to the first of March, 1914, there had been no change in the eruption. On her last visit, about the middle of April, the eruption had faded some and the parts were less tender. The accompanying photo was taken seven months after the operation.

My first impression was that the case was a simple erythema. The intense redness, burning sensation and increased temperature, proved it to be more in the nature of a dermatitis.

INSTRUCTIONS TO LOCAL EXAMINERS.*

BY

W. A. KING, M. D.,

SAN ANTONIO, TEXAS.

During the past ten years many new life insurance companies have been organized. Each one has endeavored to put out something more liberal and attractive than its competitor. This, together with very stringent laws enacted in most of the states, has reduced the profits in the life insurance business to the excess interest on the reserve and the saving in mortality. The younger companies not having much reserve must depend largely on the saving in mortality for their profit. In order to do this they must have a well-organized and competent medical department. It matters not how competent the medical director and his assistants may be no medical department can be a success without an honest, competent and well-trained corps of local medical examiners. In the absence of any instruction in our medical colleges on this subject the Medical Directors' Association of Texas has sought the organization of this section. For some time I have been at a loss to understand why the medical colleges do not teach life insurance as a part of their curriculum. The life insurance companies, industrial and ordinary, paid the medical profession last year $8,000,000, exclusive of home office salaries. With this large amount of money augmenting the income of the physicians of this country it would seem that more attention would be given to preparation for this work.

I have decided to discuss for a few minutes the examination blank. In the limited time assigned me I cannot attempt to cover but a small part of it, but I trust that in the discussion to follow other important particulars will be brought out.

We often hear examiners remark that some of the questions in the blank are of little or no consequence and to their minds should be left out. We must remember that there are as many different blanks as there are medical directors and each question in the blank was put there by the medical director for some purpose and he wishes a correct answer in order that he may form his opinion as to the desirability of the risk.

As to the question whether *married or single.* The experience of all observers points to the fact that the married outlive the unmarried, except in women of the younger ages. The following, based on the statistics of New York state, may be taken as an example:

	DEATH RATE.	
Age.	Unmarried Men.	Unmarried Women.
20-29	57% greater	18% less
30-39	119% greater	17% greater
40-49	105% greater	22% greater
50-59	69% greater	37% greater
60-69	60% greater	32% greater
70-79	39% greater	34% greater

Insurance in force and pending.—We wish to ascertain two facts from this question: (1) Is the applicant financially able to carry the additional amount applied for? (2) We wish to protect ourselves from what is known as self-selection by the applicant against the company. An individual may in some way learn that his health is impaired and at once begin to apply for large amounts of insurance, usually of the cheapest variety, even though he may apply for amounts far in excess of his financial ability to carry. This at once arouses the suspicion of the medical director and such policies are not issued until the company is perfectly satisfied that the applicant is both physically and financially able to carry the policy.

Have you changed your residence on account of your health? To those of us in Texas this is a very important question. We have in our midst thousands of individuals who are arrested cases of tuberculosis. We know how easy it is for a certain number of these individuals to relapse, a case of la grippe or pneumonia or financial and domestic troubles, may lower their vitality and down they come with a relapse. These individuals should not be given insurance for many years and even then I doubt whether they should be given a standard policy.

*Read before the Section on Medical Life Insurance, State Medical Association of Texas, Houston, May 12, 1914.

Does the applicant appear older than the age given? It is an adage that a man is as old as his arteries. It is a well-known fact that in this day of fast living and high finance many young men are prematurely old. These men should be examined with great caution. In fact, the large majority of men who appear decidedly older than the age given are not entitled to a standard policy at all.

Are you opposed to employing a legally qualified physician should you become ill? This is a question on which all medical directors are not agreed. I am of the opinion that when this question is answered in the affirmative such an individual belongs to the sub-standard class and should not be given a standard policy.

To what extent do you use alcoholic liquors? The correct answer to this question is very hard to obtain. The local examiner should always forward a private communication to the medical director when he knows that the applicant drinks more than is stated in the application. From all the evidence at hand it seems clear to me that we are too liberal with the class of individuals who drink alcoholic liquors. The M. A. table shows the following facts:

Class 17—
Occasional excesses—1 excess or more, last within 2 years of application.....174
1 excess or more, last between 2 and 5 years of application.....148
1 excess or more, last between 5 and 10 years of application.....150
1 excess or more, last more than 10 years before application.....139

Class 18—
Those using alcohol at time of examination, which are divided into two classes:
Conservative interpretation had a mortality of....118
Liberal interpretation had a mortality of.....186

Class 19—
Formerly intemperate, voluntarily reformed without treatment, all classes.....132

Class 20—
Teetotaler who was intemperate and took the cure, all classes.....135

These four classes include all individuals who drank at the time of the application, or had ever been intemperate in the use of alcoholic drinks. The mortality is such as to justify my statement that we have been too liberal with this class of risk.

Appendicitis.—We must regard with suspicion acute indigestion, cramp of the bowels, etc. The examiner should always mention any gastro-intestinal disorder and the abdomen should always be examined for tenderness and enlargement at McBurney's point. My company narrowly escaped a death claim in an individual who had three attacks of acute indigestion but not of sufficient severity to make note of in the examination, so he and the examiner thought. A short time after this he developed a severe attack of appendicitis, from which he recovered but refused to be operated. I felt confident he would have another attack and took up the policy on the ground of misstatement of fact in application. I am informed that this man has since died of appendicitis.

Fistula in ano.—Fistula in ano is not of importance except in the light-weight individual, in whom the mortality is higher on account, principally, of tuberculosis.

Syphilis.—According to M. A. Special Tables, syphilis in the past has been very expensive to life insurance companies. On page 6, Volume 4, we find the following:

B. One attack 3 to 5 years prior to application, in no case had there been less than two years' continuous treatment and one year freedom from symptoms. First class show a mortality of.....139%
C. One attack between 5 and 10 years prior to application show a mortality of.....174%
D. One attack more than 10 years prior to application show a mortality of.....217%

With the modern methods of detecting syphilis this mortality may be cut down. However, the character of the technique employed is so unusual as compared to the usual course of the examination, I doubt if many will comply with its provisions, but to my mind this class of individuals should not be accepted on any other basis. No application should be considered for at least fifteen months after treatment has been discontinued, during which time at least three negative Wassermanns have been obtained, followed at the end of this time by a provocative Wassermann, which, if negative, should entitle the applicant to an endowment policy, provided his blood vessels and nervous system are in a good condition and he is otherwise a first-class risk.

Pleurisy.—From my experience as a medical director I am of the opinion that many examiners do not pay sufficient attention to this question. When an applicant states that he has had pleurisy it must be remembered that he is a representative of a class of individuals of which 30 to 50 per cent will die of tuberculosis within five to ten years from the date of attack. Some writers place the proportion of tuberculous pleurisy as high as 80 per cent. However, we know the percentage is sufficiently high to warrant our postponing these cases for a long period of time. The most recent and perhaps best authority is M. A. Special Reports, which give us the following table:

One attack within 2 years of application.....147%
One attack between 2 and 5 years of application.....146%
One attack between 5 and 10 years of application.....113%
One attack more than 10 years from date of application..... 92%

According to this table these people should not be insured for at least ten years after the attack.

Pulse Rate.—The pulse rate should be taken at the beginning of the physical examination. According to most companies the pulse rate should not exceed 90. I am of the opinion that only individuals of normal height and weight less than 35 years of age, with blood pressure normal and who are otherwise first-class risks, should be accepted with a persistent pulse rate of 90. The M. A. investigation shows that all classes with a pulse rate between 90 and 100 have a mortality of 174 per cent. It is the fast heart that kills. The same tables show the intermittent pulse to be more favorable, particularly in the younger ages. Prior to 30 years the intermittent pulse shows a mortality of 88 per cent. Beyond that, however, it runs from 115 to 132 per cent, yet not so high as the persistently fast pulse. The irregular pulse is still more favorable, with a mortality prior to 30 years of 79 per cent. and a mortality for all years of 95 per cent.

The over-weight individual is always a bad risk, except in the younger ages, and is bad then if very excessive. Past middle life the mortality in over-weight is in proportion to the amount of over-weight and is always high. The mortality is particularly high in all cases where the abdomen is larger than the chest expansion. The light-weight is a bad risk in the younger ages on account of lack of resistance to disease, tuberculosis being the cause of the greatest mortality in ages from 15 to 30. After the age of 40 the light weight becomes a good risk and lives to see his over-weight neighbors pass away with nephritis, apoplexy, heart disease, etc. M. A. Special reports that in men the mortality of over-weight is extremely bad except in the younger ages, and at all ages past 50 the extreme light-weight has been the best risk. In all border line cases it is important to be exact as to height and weight.

In conclusion, I would urge the necessity of answering all questions. A great deal of time is lost in letters which have to be written in the correction of errors.

Each applicant must be identified to the satisfaction of the examiner.

Every sample of urine must be passed in the presence of the examiner. The life insurance companies have lost large sums of money on account of violation of this rule.

The family history should be given as completely as possible, with full particulars as to cause of deaths and the age at death.

Should the examiner be in possession of any facts regarding the individual's family history, personal habits or anything else the medical director should know, a private communication should be immediately sent in.

The examiner should not be offended if the company turns down a risk he has recommended as first-class. The fact that such an individual is refused is no reflection on the examiner, as more applicants are rejected on inspection report than from physical examination.

ABSTRACTS OF DISCUSSION.

Dr. W. T. Dawe of Gonzales, asked whether the companies wanted all examination papers sent in, whether completed or not, and whether or not the examiner thinks the applicant might stand a better examination later on.

Dr. J. H. Florence of Houston, said the companies wanted reports on all cases presented for examination, no matter what the result of the examination.

Dr. Hooper of Port Huron, Michigan, said that as medical director of a company dealing with women only, she had found over-weight more important than was formerly thought, especially in women over 35 years of age. She said that it is a fact that there are an unusual number of cancers in women who are over-weight and more than 35 years old. Under-weight women past 40 are not rejected so generally if their physical condition otherwise is good; if under 40, greater care is exercised in selection.

Dr. Andrew J. Pope of Abilene, said the medical director should give the careful, conscientious examiner more protection as against the careless examiner. Some examiners are careful to establish with the solicitors the reputation of never having a rejection. The medical directors could find out who were and who were not doing their full duty, by sending around an individual known to be suffering from albuminuria and diabetes. If the examiner is careless in his urinalysis he is likely careless in other respects.

Dr. J. H. McCracken of Mineral Wells, said that examiners owe it to the insurance companies to give all the facts connected with the case, so the medical director will have all the information before him. Outside reports are often prejudiced and unfair to the applicant, and he does not think much credit should be given them, and that the information is not worth the money. The examiner knows more, or can find out more, about an applicant, than anyone else. It would pay the companies to study their examiners, and if any are found to be incompetent they should be dropped.

HOW TO FIT UP A PRACTICAL CLINICAL LABORATORY.*

BY

B. F. SMITH, JR., M. D.,

GALVESTON, TEXAS.

A practical clinical laboratory comprises: (1) A conveniently arranged desk and storage case; (2) necessary chemicals and laboratory apparatus; (3) a card index system summarizing the technique for each examination and the stains and solutions required; (4) report blanks

*Read before the Section on Medicine and Diseases of Children. State Medical Association of Texas, Houston, May 13, 1914.

for recording and filing the results of examinations.

THE LABORATORY DESK AND STORAGE CASE.

It is necessary to have a table fitted up in such manner that time and labor shall be conserved. It is also necessary to have protected shelving for chemicals used in making up stains and solutions. The table and shelving may be conveniently arranged in the form of a combination laboratory desk and storage case.

In building such a desk and storage case the first thing to determine is the height of the desk proper. It is preferable to stand up while doing laboratory work. To get the height of the desk top, hold your microscope in such manner that it is convenient to look through. Measure the distance from the under surface of the microscope base to the floor and that is the height of your desk top. My own desk top is 3 feet and 9 inches from the floor. Having determined the height, the other measurements are as follows: Width of top, 22 inches; length, 4 feet and 6 inches. The back above the desk top is 48 inches long by 23 inches high. The top shelf across this back is 54 inches long by 4 inches wide. The height of the under surface of the second shelf, from the upper surface of the first shelf, is 5 inches. The height of the under surface of the top shelf, from the upper surface of the second shelf, is 5¾ inches.

Five inches from the left end of the top shelf, build a box-like enclosure 4 inches high, that will just fit around a gallon bottle. Let the back projection of this enclosure come flush with the back edge of the shelf.

Under the top of the desk, on the right hand side, put in a drawer 4 inches deep, 18 inches wide and 14½ inches from front to back.

In the lower part of the desk there are two doors, each of which measures 21 inches wide and 35 inches high. The facing above the doors is 6 inches wide. The front base beneath the doors is 3 inches wide.

Shelving is built in on the right side of the base; the upper part of the left side of the base is left free for the sink and plumbing connections. The height of the first shelf from the floor is 13 inches and on the right side it is as wide as the case but on the left side it is only 12 inches wide. The height of the second shelf from the floor is 24 inches.

The following is the best method of finishing the desk top:

Solutions required:

No. 1.—	Iron sulphate	4 parts.
	Copper sulphate	4 parts.
	Potassium permanganate	8 parts.
	Water	100 parts.
No. 2.—	Anilin	12 parts.
	Hydrochloric acid	18 parts.
	Water	100 parts.
No. 3.—	Turpentine	2 parts.
	Raw linseed oil	1 part.

The desk top must be of well dried lumber. Apply two coats of No. 1, boiling hot, with a mop. Let the first coat dry well before applying the second and rub off with a gunny sack. Then apply two coats of No. 2, in the same manner. Then apply several coats of No. 3 and rub down well between each coat.

In the solutions the cheapest materials may be used; that is, they need not be C. P. chemicals. The secret of success is to follow directions and rub down well with rough material after each coat is dry. Use 5 or 6 coats of solution No. 3, as this is the acid proof coat.

At the back of the top of the desk, in each corner, have an ordinary electric light socket connected with the electric lighting system. One of these is for microscopical work at night or on dark days, and should have a small, frosted, spherical globe. The other is for the electric centrifuge.

A piece of heavy plate glass, 10 inches square, is countersunk into the top of the desk, 5 inches from the right edge and 3 inches from the front edge. This is for the microscope and its covering bell jar.

A sink 16 inches square and 10 inches deep, is set in the top of the desk 9¼ inches from the left edge and 2¾ inches from the front edge.

The centrifuge is bolted as near the left edge as it will go. Bolts are necessary for screws soon work loose.

At a height of 13 inches, on the outside of the left end of the back, nail a piece of wood ¾ inch square and 4½ inches long. Through the center of this bore a hole ¼ inch in diameter. Through this hole put a 3½ inch bolt. Cut another piece of wood ¾ inch square and round out two places ¾ of an inch from each end, so they will fit the burettes. Bore two holes, in size sufficient to take the two burettes, through the projecting end of the top shelf of the back. With this device two 100 c.c. burettes are clamped to the end of the desk back.

Lead two faucets up so they will pour water into the sink. One of these is to provide a water supply, the other to connect with Chapman's suction pump, used in cleaning blood pipettes.

Twist a piece of heavy copper wire so as to make a staining fork, and tack it to the top of the desk so that the fork part projects well over the edge of the sink.

Lead a rubber tube down from the gallon bottle, which contains distilled water, so that the end is over the sink. Screw eyes can be placed along to guide the tube. Point the end of the rubber tube with a straight medicine dropper. Use a screw cut-off on the tube in place of a clamp.

Into the top shelf drive 5 heavy wires, of such height that they will support a 100 c.c., a 50 c.c. and a 10 c.c. cylinder measure and

two 200 c.c. beakers, in such manner that the dependent portions will be about 1 inch from the surface of the shelf.

THE CARD INDEX SYSTEM.

Laboratory work is much simplified by having typewritten cards giving in brief form the formulae for stains and solutions, the technique and in some instances, the significance of the findings. These should be worked up for every form of clinical examination you expect to make in your laboratory.

As an example in point, the epitome of the Diazo reaction should read as follows:

A. Solutions required.

1. Formulae.

1a. O. 5% Sodium nitrite in water.

2a. Sulphanilic acid..... 5 c. c.
HCl ..... 50 c. c.
Aquae dis.....1000 c. c.

2. Technique for using.

To one part of sodium nitrite solution add 50 parts of sulphanilic acid solution, and to this mixed solution add an equal volume of urine. To the mixture add quickly an excess of ammonia. Shake: If positive the urine will take an intense red, the foam a more or less brilliant rose-red color; a salmon tint is not positive.

B. What a positive Diazo indicates.

It is never present in health. Of the non-febrile diseases it may be present in advanced heart disease, chronic hepatitis, carcinoma, especially of the pylorus leukemia, marasmus senilis, malarial cachexia, tuberculous abscess, etc. In these it is rarely positive.

Ehrlich classifies the febrile diseases as follows:

1. Those in which the reaction is almost never given—acute articular rheumatism and meningitis.

2. Diseases in which it may or may not be positive—pneumonia, scarlet fever, diphtheria, erysipelas and phthisis.

3. Those in which it is almost constantly present—typhoid fever and measles.

THE REPORT BLANK.

Have report blanks printed so as to conform in size to your other record sheets. Let them show space for recording the following:

Blood.—Erythrocytes—; leucocytes—; haemoglobin—; color index—; polys—; lymphos—; large monos—; transitionals—; eosinophils—; basophils—; myelocytes—; nucleated reds—; poikilocytosis—; malarial parasites—; widal reaction—; Noguchi reaction—; blood pressure—.

Stomach Analysis.—Test meal—; free HCl—; combined HCl—; total HCl—; total acidity—; lactic acid—; mucus—.

Smear.—Smear from—; gonococci—; diphtheria bacilli—; streptococci—; Vincent's angina—; other organisms—.

Tissue Examination.—Tissue from—; report.

Urine.—Color—; amount—; reaction—; Sp. Gr.—; sediment—; albumen—; sugar—; Diazo reaction—; urea—; indican—; renal function—; erythrocytes—; crystals—; blood casts—; fatty casts—; epithelial casts—; granular casts—; hyaline casts—; leucocytes—; epithelial cells—.

Feces.—Occult blood—; mucus—; erythrocytes—; amoebae—; leucocytes—; ova—.

Sputum.—Tubercle bacilli—; other organisms—.

Culture.—Culture from—; organisms present—.

Spinal Fluid.—Appearance—; pressure—; meningococci—; leucocytes—; other organisms—.

THE PURCHASING OF EQUIPMENT.

The following lists of apparatus and chemicals include everything needed for the routine examination of urine, stomach contents, feces, sputum, tissue and blood. Also for growing cultures of diphtheria bacilli and for staining gonocoeci and diplococcus intracellularis meningitidis.

In the local market can be purchased the material for the laboratory desk and storage case. Also a quart thermos bottle, which can be used very successfully as an incubator.

My equipment is as follows, and it has been satisfactory in every way[1].

One No. 158 card index cabinet, no rod, oak	$ 3.50
One set 40 index guides, A-Z plain tabs, No. 1 grade, 5 by 8 inches	.58
500 blank record cards, No. 2 grade, medium weight, 5 by 8 inches	2.71
M 326 Test tubes, 5 inch, 2 doz	.30
M 691 Spatula 3 inch blade, 1	.20
M 637 Metric weights, 20 gm. to 1 cgm., 1 set	.65
M 204 Florence flask, 16 ounce, 1	.23
M 246 Dropping bottles, 2 doz	4.80
M 306 Electric centrifuge, 1	20.00
M 356 Metric measures, 1 each, 5 cc, 10 cc, 50cc, 100 cc	.97
M 262 Sahli's haemaglobinometer, 1	5.50
G 110 Cylinder jar, ground glass cover 6x6 inches, 1	1.25
M 370 Beaker glasses, 5 ounce, 2	.24
G 538 Glass mortar, 4 ounce, 1	.25
G 439 Volume pipette, 10cc, 2	.30
M 141 Bell jar for microscope, 8½x17 inches 1	2.25
M 245 Preparation bottles, 2	.50
M 353 Urinometer with test jar, 1	.25
M 30 Mechanical stage, 1	16.00
G 446 Mohr's burettes, 100 cc with stop cock, 1	1.75
DS 46 Pkg. filter paper, 6", 1 pkg	.29
M 150 Glass slides, 3x1", 6 doz	.50
M 153 Slide box for 25 slides, 1	.15
Copper sulphate, ¼ lb	.25
Sodium potassium tartrate, powdered, 1 lb	.39
Sodium hydrate, ¼ lb	.80
Sodium nitrite, 1 oz	.25
Acid sulphanilic	.30
Acid hydrochloric, sp. gr. 1.124, 1 lb	.60
Glycerine, sp. gr. 1.251, 1 lb	.60
Sodium sulphate, 1 lb	.45
Sodium chloride, ¼ lb	.20
Potassium hydrate, 1 oz	.20
Aniline, Kahlbaum, 1 lb	1.00
Alcohol, ethylic, absolute, 99.8%, 1 quart	1.40
Methylviolett, 10 gms. L. B	.38
Gentiana-violet, gram u. a. 10 gms	.25
Iodine, 1 oz	.40
Potassium iodide, 1 oz	.40
Acid carbolic, 1 lb	.90
Bismarckbraun, 25 gms	.44
Fuchsin, basic, 10 gms	.25
Benzidine for blood test, 1 oz	.80
Acid acetic, 99.5%, ¼ lb	.30
Romanowsky stain (Wright's modification), 3 tubes	.75
Methyl alcohol, 12 tubes	3.00

Oil cedar, special for immersion objectives, Zeiss, ½ oz	.30
Xylene (Xylol), 1 lb	.28
Hydrogen peroxide, 3%, 1 lb	.28
Phenolphthalein, indicator, 1 oz	.5
Di-methyl-amido-azo-benzole, c. p., 1 oz	.93
Alizarine (Sodium monosulphonate) for gastric analysis, 1 oz	.28
Iron chloride (Ferric), ¼ lb	.25
Alcohol, 95% ethylic, 1 gallon	3.50
Antiformin, 1 lb	.50
Bromine, 1 oz	.30
Potassium bromide, ¼ lb	.30
Celloidin shreds, 1 oz	[illegible]
Haematoxylon puriss kristall, 10 gms	.65
Aluminum ammonium sulphate, c. p., 1 lb	.33
Balsam, Canada, dissolved in Xylol, 20 cc tube, 1	.30
Eosin, soluble in water, B. A., 10 gms	.30
Methylenblau, for bacilli staining, Koch, 10 gms.	.30
16080 Platinum wire, 10 cm	.45
15550 Lens paper, Japanese, size 185x275 mm, 1 pkg	.35
12034 Air pump, Chapman's No. 1, 1	1.50
12036 Air pump, Chapman's, couplings for, threaded	.35
1355 Haemacytometer, Thoma-Zeiss, with blood pipettes and counting chamber with Tuerk ruling	12.00
1270 Labels 22 mm square, in book of 500	.30
5820 Litmus paper, red, 100 strips	.15
5830 Litmus paper, blue, 100 strips	.15
3010 Section lifter, 40x12 mm	.30
3015 Section lifter, 40x20 mm	.35
5515 Brushes, Camel's hair, quill handle, hair length 18 mm, 2	.16
6470 Glass tubing, outside diameter 5 m.m., ½ lb	.25
6465 Glass rod, diameter 5 m.m., ½ lb	.25
1870 Ureometer, Doremus-Hindes, on glass foot	3.00
6800 Thermometer, chemical, length 300 m. m., graduated to 100° C	1.10
12 tubes Loeffler's blood serum for growing diphtheria bacilli	1.50

The microscope and microtome are not included in the above list, for every man has his own choice.

1. These supplies were purchased from several different firms, and the author will send the missing data to any reader who is sufficiently interested to write for it. It will be noted that catalogue designation is given.—Editor.

The False and Fraudulent Labeling of Medicines and Mineral Waters has recently received a great deal of attention from the Bureau of Chemistry, according to the Bureau's report for the year ending June 30, 1914. A large number of instances have been found in which impossible claims for the preparations in question have been made and in these cases steps have been taken to compel the owners to alter the labels. Measures are being taken to prevent the exploitation of so-called radioactive waters in which the amount of radium is negligible. Furthermore, mineral waters to which has been added carbonic acid gas or mineral salt, are not any more, sold as "natural," but are properly labeled.

INOCULATION OF LUPUS VULGARIS WITH STREPTOCOCCUS: CASE REPORTED.*

BY

C. P. BREWER, M. D.,

Curator Pathologic Museum, Medical Department, T. C. U.,

FORT WORTH, TEXAS.

Of the numerous forms of lupus I shall have nothing to say, beyond what is required for the purpose of this brief paper. Nor shall I assume that it is needful for me to expatiate upon the pathology of lupus vulgaris, further than in a general way.

The cause of lupus as now well known, is the tubercle bacillus. True lupus is a true tuberculosis of the skin or mucous membrane and its pathologic process is established. We may obtain full knowledge of its microscopy, etc., from the very abundant literature.

The course of lupus vulgaris is chronic from the beginning and occurs in the early life of the child. The authorities tell us it runs to about the thirtieth year. In this I think they are incorrect, for the disease seems to get more virulent at about that period. This increased activity, as a whole, is accounted for on the ground of increasing attention, especially from the "Cancer Specialists" and the empirical friends of the sufferer, who abound in diagnostic lore and therapeutic measures, from sheep's sorrel to arsenical paste—and here is where many a "cancer doctor" has achieved brilliant cures of epitheliomata with their strong mineral pastes; and often have done irreparable harm by destruction of sound unoffending tissues, with resultant large, unsightly facial cicatrices, and even blindness. Not only have those who belong, confessedly, in the category of quacks, been guilty of calling *lupus exedens* epithelioma, but some of the best practitioners in the profession have fallen into this common error. Eventually Koch found the bacillus tuberculosis, and the miscroscope was turned upon the exedra of lupus and "the wolf" was found to be the protean bacillus of Koch.

The favorite location of this disease is about the face, and especially about the palpebral margins and the alae nasi; and the microscope shows that it attacks the cellular tissues, which are vastly enlarged, the cells absorbing the substance of the connective tissue in their struggle for re-inforcement against the invasion, so that the picture is one of giant cells resting among atenuated, netted fibres of supporting tissue. The development is exceedingly slow, and it may be that nothing but a harmless looking

*Read before the Section on Pathology, State Medical Association of Texas, Houston, May 12, 1914.

tubercle is noticed for a number of years; then the critical moment comes—a coarse towel, or a razor, passes over this tubercle, or dry scale, and the next morning, or, maybe the next week, there is an areola with slight itching, maybe a burning pang, a few shooting pains; or maybe nothing except the red ring of pigment announces the change; then one morning the patient finds an abrasion caused by scratching in the sleep of the preceding night, and in a few days an ulcer is established and simply stays there. But it is unsightly and he does not like it, takes the advice of neighbors and applies "simple" salves, ointments and patent medicines; but all this time it has continued to grow. The patient now is scared, he wishes he had let it alone. He writes to an advertising specialist who sends him a plaster made of equal parts of sodium chloride and hard boiled egg yolk, to be moistened with apple vinegar and applied under an egg skin, to remain for 24 hours,[1] all of which is done faithfully—and then it *does* grow! Now he is scared sure enough, and goes to a local doctor for help. This doctor burns the thing with stick caustic and it gets well, but what a scar! Or he gives him a strong suspension of iodoform inflexible collodion and it heals in a few days.

But, and here is where it got its name, it always leaves something behind to rekindle its fires, and in a few months it is back again. It seldom selects the same site for a second attack. Even though it may be removed but a fraction of an inch, the centre will not likely be the one of the preceding ulcer, and for a good reason; if the preceding ulcer was cured the cellular tissue of the former site has been permanently disqualified by the last of the two distinct clinical features of true lupus—complete atrophy of all the affected tissues, by exhaustion of the trophic nerve supply. (The other clinically distinct feature is that which sets aside the diagnosis of epithelioma—*its early appearance.*) To this aversion for original sites I have known but one exception, that one will be related in the case report, which is to follow:

In November, 1902, a man was brought to my office for treatment, and on examination his case proved to be erysipelas, with an ischio-rectal abscess and extensive necrosis of the spongy parts between the rectum and the ischium. I made a free incision and there was a flow of dark sero-purulent material. I stood over the patient and watched its flow for sometime and thought of the words of one of my medical friends who, a few days before, had said when we met on the street corner, "Brewer, you ought to have that cancer cut out of your face." Then came the writings of Coley, and of others who had for years been urging that inoculation with mixed toxins of the streptococcus pyogenus and the bacillus prodigiosus, would cure sarcoma of the spindle-celled variety. I possessed no means of ascertaining the variety of my own, but the dictum of a former teacher was too weighty for me to ignore, and here was mixed toxin. Erysipelas was dangerous, but so also was cancer. I dipped my middle finger into the black stream and lifted it to the sore on my face and rubbed it in. This was done at about 10 a. m., Monday. At about 8:30 p. m. the Wednesday following, I was in church and felt lightning-like pains for a moment or so in the site of the sore. A doctor sat just in front of me, and I requested him to inspect the place; he did so, and told me of an areola extending about half an inch beyond the border of the ulcer. At nine o'clock we were on the street, and the doctor announced that the areola had spread to the middle of my right cheek and across the bridge of my nose. At 12, midnight, I was unable to see and was restless. My temperature was 103° F. At 5 a. m. I was unconscious, in which condition I remained until 11 o'clock of the fifth day, Monday morning. When I awoke I could see nothing, but in a few hours I was not only able to see, but the swelling had so rapidly subsided that I was able to go to my office and to attend to practice there three days later, and a few days later my ulcer came out like a tuber.

About two months later small tubercles began to develop on the site of the former ulcer, and continued to increase in size and number, and the sore was larger than before the inoculation. A subsequent classical treatment healed it and produced the assuring atrophy which has remained for about eight years, with no tendency to a recurrence of the lupus in any part of the face.

CONCLUSIONS.

1. The proceeding was dangerous and foolhardy; but I would rather die of a rapidly fatal erysipelas than of a slow cancer.
2. The lesion was healed but not cured.
3. The mixed toxins produced healing but probably prevented destruction of the trophic function of nerves of nutrition, and the bacillus was free to select the old site for the renewal of its attack. The mixed toxins probably do not destroy the bacillus tuberculosis, and may become conservators of its supporting resources, even exhilarating its course.
4. This inoculation apparently produced immunity against erysipelas, as I have never had that disease although since much exposed to it. This I remark because I had never before seen a case in anything like intimate contact, without a violent attack about my face, due to the tuberculous atria always affording it entrance, while previous attacks afforded no protection. The usual number of small tubercles have continued to exist *but do not* infections *do not transpire.*

[1] "Dr. Van Meter," Springfield, Ill.

CELERINA AND ALETRIS CORDIAL. (Rio Chemical Co.)—Celerina is a shot-gun mixture said to contain, in addition to 42 per cent of alcohol, kola viburnum, celery, cypripedium, xanthoxylum and aromatics. Aletris Cordial is said to contain 28 per cent alcohol (more than is found in wine,) besides three obsolete and valueless drugs, aletris, helonias and scrophularia. Whatever virtue there is in Celerina and Aletris Cordial is derived from the alcohol. (*Jour. A. M. A.*, October 17, 1914).

MISCELLANEOUS

TWO OF OUR GOOD FRIENDS.

We are pleased to present herewith the likeness, and a brief reference to two of our very good friends in the Legislature, one in the Senate and one in the House. There are others we would like to introduce in this manner to our readers, but they have either modestly evaded our request for a photograph or circumstances have not offered us the opportunity to make application therefor. Particularly would we like to have presented our worthy fellow physician, Dr. R. G. Powell of Baird, who served the House as chairman of the Public Health Committee.

SENATOR I. E. CLARK.

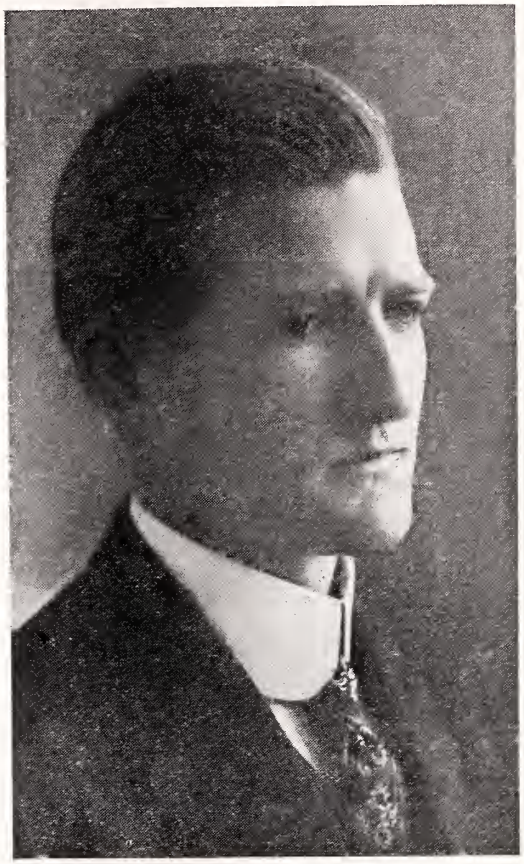
Senator Clark served as a member of the Senate Committee on Public Health, and was universally looked upon by the Senate as censor for all public health legislation. That he fulfilled this function efficiently, is attested by the large number of more or less impractical public health bills that never saw the light of day, and by the few that were thoroughly worked out before they received the consideration of the Senate, with the indorsement of his committee. Senator Clark was born in 1860, and graduated in medicine in Jefferson Medical College, Philadelphia, in 1883. We get this information from the Medical Directory of the American Medical Association, and that is as far as we are able to go with the personal history of our good friend and

SENATOR I. E. CLARK.

colleague, the champion of righteous public health legislation, and the implacable foe of freak public health legislation. His home is in Schulenberg.

REPRESENTATIVE MYRON G. BLALOCK.

Mr. Blalock came to the support of the medical profession in its efforts to secure beneficial public health legislation, and particularly in its contention against the enactment of such harmful and essentially unjust legislation as the optometry and masseur bills, not so much because his influence had been solicited as by reason of his faith in the integrity of the medical profession and his intellectual grasp of the situation. Quite unconsciously he became one of the trusted leaders of the legitimate public health crusaders, and to him we owe very largely the fact that the quite formidable optometry



REPRESENTATIVE MYRON G. BLALOCK.

bill was finally overcome. Of course, in saying this, we do not recede in the least from our debt of gratitude to our trusted friend, the Hon. Roger Byrnes, concerning whom we have before remarked, and whose likeness appeared in the JOURNAL on another occasion.

Mr. Blalock was born on his father's farm in Harrison county, in 1891, from whence he removed to Marshall in 1906, following the death of his father, who was at the time a member of the State Legislature, the same position held at the present time by the subject of our sketch. He graduated in the high school of Marshall in 1910, entering the State University in the fall of the same year. He took the degree of Bachelor of Arts in the university in 1914, and is at the present time taking the course of law in the same institution, from which he expects to graduate as LL. D. in 1916. Mr. Blalock's personal history has to the present time been one to which he and his friends can justly point with pride. He has worked his way through high school, the main department of the university, and now is taking his professional work in conjunction with his service in the Legislature, and such other employment as comes to hand. He was elected to the Legislature over his opponent, a popular citizen of his home county, by a majority of eight to one, when he was but 21 years of age. He has had no opposition for the position since that time. He represents the 126th District, composed of the counties of Harrison and Gregg, in East Texas, and

bears the distinction of being the youngest member of the House. He is not a prolific maker of bills, and professes to believe that a great majority of those introduced by other members should be killed forthwith and immediately. He is the author of a constitutional amendment reducing the membership of the House from 142 to 93 and putting the members on a salary basis, believing that fewer members and less haste will result in much legislative improvement. His training as a farmer and experience in chopping cotton, probably account for the growth and maturity of this sentiment. There are those who believe with him, that a great many of our institutions would be better if thinned down to one or two to the hill.

TEXAS ROENTGEN RAY SOCIETY TO MEET.

The Texas Roentgen Ray Society will hold its second annual meeting at the Westbrooks Hotel, Fort Worth, Wednesday, May 5, beginning at 9 a. m.

At this meeting a change in time of meeting will be considered, and doubtless made, so that in the future there will be no conflict with any of the program of the State Medical Association.

The society will have a display of *x*-ray plates in the general scientific display of the State Medical Association, at the Auditorium.

George D. Bond, M. D., Pres.

CLASS "B" SCHOOLS IN TEXAS.

Dear Doctor:—We note in the March issue, page 481, of the Journal, a news item clipped from the *Waco Times-Herald*, stating that the medical schools of the state rated as "B" had been "scored" by the State Board of Medical Examiners, and that "strenuous methods would be used to force them to improve their work."

May I ask you to note in your columns that the impression left by this statement is not correct? While the Board of Medical Examiners have made certain demands, the schools rated "B," in Texas, are, almost without exception, voluntarily bringing about rapid improvement in their facilities and their work. Fraternally,

College Committee,
State Board of Medical Examiners.

NEWS

New Nationalism Outlined at Conference of Charities.—Announcement has been made from the headquarters of the National Conference of Charities and Correction of the revised program of its forty-second annual session, to be held at Baltimore, Md., May 12-19, 1915. The program, to be contained in an early bulletin, includes the names of more than two hundred speakers. The character of this extensive series of discussions will be largely affected by social welfare legislation recently enacted in many states, by the reports of special state and municipal commissions during the winter, and by the recent emergence of many national issues of a social nature, such as have been disclosed in the investigations of the Federal Industrial Relations Commission. In addition, a growing conviction of the social bases of international amity has led to a greater definiteness in outlining fundamental issues in the United States. Hence considerable importance attaches to the subject of the keynote address of this conference, "A Prelude to Peace," to be given by the president, Mrs. John M. Glenn of New York.

The coming of the conference is being anticipated by the city of Baltimore, which is making a survey of local social conditions to be set forth in a public exhibit. The chairman of the Baltimore committee is General Lawrason Riggs, and the secretary, Dr. J. Hall Pleasants. Preparations are being made to entertain twenty-five hundred guests. The address of welcome will be made by President Frank J. Goodnow of Johns Hopkins University.

Of scarcely secondary importance to the National Conference program are the meetings of a series of related organizations, nine of which have published programs. These include the American Red Cross, the Association of Officials of Charity and Correction, the National Federation of Settlements, the National Probation Association, the Association of Jewish Social Workers, and the Societies for Organizing Charity.

Southern Sociological Congress to Meet in Houston.—The Southern Sociological Congress will meet in Houston May 8-11. The preliminary program has been issued, and contains many speakers of national prominence. Those from Texas are: Governor Ferguson, Rabbi Henry Cohen, Galveston; Dr. S. P. Brooks, of Baylor University, Waco; Mr. R. J. Newton, Austin; Dr. B. L. Arms, Galveston; Dr. W. M. Brumby, Waco; Miss Ethel Claxton, Houston; Prof. T. G. Kenney, Houston; Dr. M. M. Carrick, Dallas; Prof. C. S. Yoakum, Austin; Dr. L. K. Williams, Fort Worth; Prof. J. C. Granbury, Georgetown; Prof. A. Caswell Ellis, Austin, and Hon. George E. Barstow, Barstow. Some of the subjects to be discussed are: *What Preventable Disease Costs the South; The Nation's Greatest Need—a National Department of Health; The Greatest Need in Southern Health Work—Correct Vital Statistics; A Worthy Substitute for War—a War on Disease; The Cause and Prevention of Pellagra; The South's Enemy of Prosperity—Malaria; Mental Health Safeguarded by Physical Health; Poisoners of Public Health; The Poor State and the Expensive Problem of Tuberculosis; The South's Penalty for Filth—the Hookworm; An Inexcusable Disease—Typhoid; Why the Federal Government Should Care for the Consumptives in the Southwest.* Subjects pertaining to Moral Health, Health of Children, Mental Health, Health and Race Relations and the Church as the Conserver of Social Health, will be discussed. A special railroad rate has been secured for the Congress on all lines in the Southeastern and Southwestern Passenger Associations. A Health Exhibit is being prepared for the Houston meeting. An effort will be made to organize social service workers of the different religious denominations into church federations. Two churches have already made a start in this direction. The Rice Hotel at Houston will be the headquarters.

Notice of State Board Examination.—The regular semi-annual examination of the Texas State Board of Medical Examiners will be held in Austin in the Hall of Representatives, Capitol building, June 22, 23, 24, 1915. All applicants should be present at 9 a. m. on the morning of June 22, and present their diplomas for inspection.

Schedule of examination: Tuesday, 9 to 10 a. m., inspection of diplomas; 10 to 12 a. m., Anatomy (Dr. Cooper); 1:45 to 3:45 p. m., Physiology (Dr. Bettencourt); 4 to 6 p. m., Chemistry (Dr. Williams); 8 to 10 p. m., Hygiene (Dr. Swain).

Wednesday, 8 to 10 a. m., Histology (Dr. Mason); 10:15 a. m. to 12:15 p. m., Medical Jurisprudence (Dr. Crowe); 1:45 to 3:45 p. m., Bacteriology (Dr. Morrow); 4 to 6 p. m., Obstetrics (Dr. McElhannon).

Thursday, 8 to 10:30 a. m., Gynecology (Dr. McLean); 10:45 a. m., to 12:15 p. m., Pathology (Dr.

Swain); 1:45 to 3:45 p. m., Physical Diagnosis (Dr. Scothorn); 4 to 6 p. m., Surgery (Dr. McCelvey).

The order of examination cannot be varied from in any respect and every applicant who desires to be examined must commence the examination on the morning of Tuesday, June 22. No person will be examined on June 22-24, except those who have made proper application on the blank forms furnished by the State Board of Medical Examiners and have paid the fee on or before June 20. Fees will be returned to those unable to appear for examination; but unless the applicant is prevented by illness from taking the examination he shall forfeit the sum of $2.00 of the fee paid to defray the expenses incurred in arranging for his examination. Applicants are required to pay a fee of 50 cents to defray expenses of paper and envelopes for examination, which the secretary furnishes. This fee should be sent in with application. The applicant's fee must be sent to the secretary at Belton. The applicant must present his diploma for inspection at the examination, not sending it to the secretary's office. The filing of an application or the taking of an examination does not entitle applicant to practice medicine, the only legal authority being a certificate from the State Board of Medical Examiners, recorded in the District Clerk's office of the county of residence. M. P. McElhannon, secretary, Belton, Texas.

SOCIETY NEWS.

EL PASO DISTRICT—No. 1.

Dr. F. P. Miller, El Paso, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, El Paso, Secretary. Next meeting will be in Sweetwater, third Tuesday in June.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

El Paso—Dr. C. F. Braden, El Paso; 1st and 3rd Mondays, September to May, inclusive.

Reeves-Ward-Pecos—Dr. O. J. Bryan, Pecos.

The El Paso County Medical Society met April 5th. Twenty-five members were in attendance. Drs. Herbert O. Darnall and Eugene Thompson, both of El Paso, were elected to membership. The names of four members were selected to be submitted to the mayor, who will appoint two of them on the new board of health. The society voted to pay the railroad fare of the secretary to the annual meeting of the State Medical Association. The following program was rendered: *Important Points in the Growth and Transplantation of Bone; with Lantern Slides and Specimen*, Drs. W. L. and C. P. Brown. The discussion was led by Dr. James Vance.

District Personals.—Dr. M. B. Wesson, El Paso, who has been ill and confined to his bed, is now convalescent.

Dr. W. L. Brown, El Paso, has returned from a trip to California.

Mr. H. C. Rawlings, father of Dr. J. A. Rawlings, El Paso, died on March 22, after a long illness incident to his advanced age.

BIG SPRINGS DISTRICT—No. 2.

Dr. N. J. Phenix, Colorado, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Ector-Midland-Martin-Howard—Dr. W. F. Johnston, Big Springs; 2nd Thursday quarterly.

Fisher-Stonewall—Dr. R. I. Grimes, Sylvester; 1st Tuesday in January and March.

Haskell—Dr. M. W. Rogers, Rule; 2nd Wednesday quarterly.

Jones—Dr. A. McK. Jones, Anson; 2nd Tuesday monthly.

The Scurry-Dickens-Kent Medical Society met in Snyder April 6. Dr. W. H. Morrow, Dunn, was elected delegate to the coming annual meeting of the State Medical Association at Fort Worth in May. Dr. L. E. Trigg was elected alternate. Steps were taken to entertain the El Paso-Big Springs District Medical Society, which meets in Snyder in June.

PANHANDLE DISTRICT—No. 3.

Dr. W. C. Dickey, Memphis, Councilor.

District Society—Dr. T. D. Frizzell, Quanah, President; Dr. J. J. Crume, Amarillo, Secretary.

Secretaries of Sections—Surgery, Dr. F. B. Bryan, Childress; Medicine, Dr. E. H. Snyder, Canadian; Gynecology and Obstetrics, Dr. B. L. Jenkins, Clarendon; Pediatrics, Dr. S. P. Vinyard, Amarillo.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Childress—Dr. F. B. Bryan, Childress; 1st Tuesday monthly.

Collingsworth—Dr. H. B. Worley, Wellington; Tuesdays.

Dallam-Hartley-Sherman—Dr. R. L. Owens, Dalhart; 2nd Tuesday.

Donley—Dr. T. H. Ellis, Clarendon; 1st Thursday monthly.

Foard—Dr. R. L. Kincaid, Crowell; 2nd Monday quarterly.

Hale-Swisher—Dr. E. F. McClendon, Plainview; 1st Tuesday monthly.

Hall—Dr. W. C. Mayes, Memphis; 2nd Tuesday monthly.

Hardeman—Dr. T. D. Frizzell, Quanah; 2nd Thursday monthly.

Hemphill-Roberts-Lipscomb-Ochiltree—Dr. H. C. Caylor, Canadian; 1st Monday monthly.

Lubbock-Crosby—Dr. J. T. Hutchinson, Lubbock; 1st and 3rd Tuesdays monthly.

Potter—Dr. J. J. Crume, Amarillo; 2nd Monday monthly.

Wichita—Dr. L. F. Stripling, Wichita Falls; 2nd Tuesday monthly.

Wilbarger—Dr. Richard W. Hix, Vernon; 3rd Monday monthly.

SAN ANGELO DISTRICT—No. 4.

Dr. S. C. Parsons, San Angelo, Councilor.

District Society—Dr. J. M. Horn, Brownwood, President; Dr. R. H. Cochran, Coleman, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Brown—Dr. H. C. Eargle, Brownwood; 2nd Tuesday monthly.

Coleman—Dr. R. Bailey, Coleman; 1st Thursday monthly.

Lampasas—Dr. W. D. Francis, Lampasas; 1st Tuesday March, June, September and December.

McCulloch—Dr. J. S. Anderson, Brady; 1st Monday monthly.

Menard-Kimble—Dr. W. M. Fenley, Menard.

Runnels—Dr. E. R. Middleton, Winters; 2nd Thursday monthly.

Tom Green—Dr. G. W. Nibling, San Angelo; Tuesday before full moon.

The Tom Green County Medical Society met in San Angelo March 30. Fourteen members and three visitors were present. Dr. E. P. Davis was received on transfer from the Harris County Medical Society. The following resolution was adopted by the society in September, 1914:

> Be It Resolved by the members of the Tom Green County Medical Society that it is believed to be against the best interests of organized medicine for any member to offer his professional services through the press or otherwise, free of charge.

Following the adoption of the above resolution Dr. A. H. Seeley was charged with gross misconduct as a physician and member for advertising. Acting upon the above charge the board of censors sustained the charge upon evidence furnished, and recommended that he be required to apologize to the society for his objectionable conduct. This was adopted by the society. This latter action was taken at the November meeting. The following program was rendered: *A Plea for More Thorough Examination of Patients Suffering from Symptoms of Early Pulmonary Tuberculosis*, Dr. S. E. Thompson, Assistant Superintendent, State Tuberculosis Sanita-

rium, Carlsbad; *Diagnosis of Tuberculous Laryngitis*, Dr. G. L. Lewis, San Angelo. The society unanimously voted to instruct the delegate to vote for Dr. S. C. Parsons for Councilor of the Fourth District at the coming state meeting.

SAN ANTONIO DISTRICT—No. 5.

Dr. W. A. King, San Antonio, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Atascosa—Dr. B. T. Yule, Charlotte; 2nd Tuesday monthly.

Bexar—Dr. W. H. Hargis, San Antonio; from October to May, 1st Thursday, Section on Eye, Ear, Nose and Throat; 2nd Thursday, Section on Medicine; 3rd Thursday, State Medicine, Public and Personal Hygiene; 4th Thursday, Obstetrics and Gynecology.

Comal—Dr. L. G. Wille, New Braunfels; 2nd Saturday quarterly.

Guadalupe—Dr. M. B. Brandenburger, Seguin; 1st Tuesday monthly.

Gonzales—Dr. W. T. Dunning, Gonzales; 1st Monday monthly.

Karnes—Dr. R. C. Youngblood, Falls City; bi-monthly.

Kerr-Kendall-Gillespie-Bandera—Dr. Wm. Lee Secor, Kerrville; 1st Monday alternate months.

La Salle-Frio—Dr. R. L. Graham, Cotulla; meets quarterly.

Medina—Dr. J. H. Fletcher, Hondo; 2nd Wednesday monthly.

Uvalde-Edwards—Dr. S. B. Hudson, Sabinal; 1st Tuesday monthly.

Val Verde—Dr. D. A. York, Del Rio; 1st Monday monthly.

Wilson—Dr. J. E. Sparks, Floresville; quarterly.

Mitchell—Dr. T. J. Ratliff, Colorado; 2nd Monday January, April, July, and October.

Nolan—Dr. A. A. Chapman, Sweetwater.

Scurry-Dickens-Kent—Dr. J. M. Bannister, Snyder; 1st Tuesday in January, April, July and October.

Taylor—Dr. L. J. Pickard, Abilene; 2nd Tuesday monthly.

The Guadalupe County Medical Society met in regular session March 2. The following papers were read: *Treatment of Fractures*, Dr. William Meyers, Seguin; *Treatment of Catarrhal Pneumonia*, Dr. C. Williamson, Seguin. Both papers were practical and instructing. Resolutions pertaining to the pending optometry and masseur bills were sent to the senator and representative.

District Personal.—Dr. N. A. Poth, Seguin, returned home about the middle of March after six weeks' post-graduate work in New York.

CORPUS CHRISTI DISTRICT—No. 6.

Dr. W. N. Wardlaw, Corpus Christi, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bee—Dr. E. P. Cayo, Beeville; Monday quarterly.

Cameron—Dr. C. W. Skipper, Brownsville; 2nd Wednesday monthly.

Hidalgo—Dr. W. R. Dashiell, Mission; 5th day monthly.

Jim Wells—Dr. M. J. Perkins, Alice.

Kleburg—Dr. R. L. Mathews, Kingsville.

Nueces—Dr. A. W. Davisson, Corpus Christi; 1st and 3rd Fridays monthly.

Refugio—Dr. L. J. Manhoff, Aransas Pass.

San Patricio—Dr. Roy T. Goodwin, Sinton.

Webb—Dr. E. H. Sauvignet, Laredo; 1st Wednesday monthly.

AUSTIN DISTRICT—No. 7.

Dr. T. J. Bennett, Austin, Councilor.

District Society—Dr. Z. T. Scott, Austin, President; Dr. W. A. Harper, Austin, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bastrop—Dr. T. B. Taylor, Elgin; 2nd Tuesday bi-monthly.

Burnet—Dr. H. S. Garrett, Bertram.

Caldwell—Dr. Edgar Smith, Lockhart; 2nd Tuesday monthly.

Hays—Dr. P. J. Shaver, San Marcos.

Lee—Dr. C. M. Jones, Ledbetter; 1st Tuesday in June, September, December and March.

Llano—Dr. C. F. Darnall, Llano; 2nd Tuesday monthly.

San Saba—Dr. C. L. Behrns, Cherokee; 2nd Tuesday each month.

Travis—Dr. J. C. A. Eckhardt, Austin; 2nd Thursday monthly.

Williamson—Dr. E. M. Wood, Georgetown; 2nd Wednesday.

The Bee County Medical Society reports the following officers elected to serve during the current year: President, Dr. H. Mabry; Vice-President, Dr. C. H. Reagin; Secretary-Treasurer, Dr. E. P. Cayo; Delegate, Dr. N. H. Bowman; alternate, Dr. G. M. Stephens. The meetings are held the second Tuesday monthly.

The Travis County Medical Society met February 12. Sixteen members were present. The program was as follows: Dr. Joe Wooten presented three interesting clinical reports, which were discussed by Drs. Preston, Gilbert, Mathis and Pettway.

Dr. Joe Gilbert read a paper, *Review of the Literature on Twilight Sleep*. Dr. Mathis gave his experience with this method in several cases in order to determine for himself whether there was any virtue in the claims of "Twilight Sleep" advocates. The paper was further discussed by Drs. Hill and Wooten.

The by-laws were amended changing the date of meeting to the second Thursday night in each month.

The Harrison narcotic law was discussed. The secretary was instructed to compile correct interpretations of the law, and mail a copy to each member of the society.

Luncheon was served after adjournment.

DEWITT DISTRICT—No. 8.

Dr. Walter Shropshire, Yoakum, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Victoria in April, 1915.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Colorado—Dr. W. G. Youens, Colorado; 2nd Wednesday February, April, June, August, October and December.

DeWitt—Dr. B. J. Nowierski, Yorktown; 3rd Wednesday monthly.

Fayette—Dr. C. M. Hoch, LaGrange.

Lavaca—Dr. Walter Shropshire, Yoakum; 2nd Tuesday monthly.

Matagorda—Dr. S. A. Foote, Bay City; 2nd Wednesday monthly.

Victoria-Calhoun—Dr. F. L. Sargeant, Victoria; 20th monthly.

Wharton-Jackson—Dr. W. B. Huey, El Campo; 3rd Friday monthly.

SOUTHERN DISTRICT—No. 9.

Dr. W. W. Ralston, Houston, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Victoria in April, 1915.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Austin—Dr. Otto E. Steck, Bellville; 1st Tuesday quarterly.

Brazos—Dr. R. J. Hunnicut, Bryan.

Brazoria—Dr. A. J. Pollard, Alvin; 1st Thursday after 1st Monday.

Burleson—Dr. T. L. Goodnight, Caldwell.

Fort Bend—Dr. R. M. Munroe, Richmond.

Galveston—Dr. M. L. Graves, Galveston; last Friday monthly.

Grimes—Dr. E. A. Harris, Navasota; 1st Wednesday monthly.

Harris—Dr. B. T. Van Zant, Houston; every Friday night.

Madison—Dr. J. E. Morris, Madisonville; last Tuesday monthly.

Montgomery—Dr. H. W. Earthman, Conroe; 2nd Monday monthly.

Waller—Dr. R. E. Bing, Waller; 1st Monday quarterly.

Walker—Dr. J. W. Thomason, Huntsville; 2nd Tuesday bi-monthly.

Washington—Dr. R. H. Lenert, Brenham; quarterly.

The Harris County Medical Society met in Houston March 6, with twenty-one members present.

Dr. John T. Moore reported a case of dermoid cyst of the jaw, recently operated, the first he had ever

encountered. He states that such cysts usually come from mesodermal tissues. The pathognomonic symptom of bogginess was absent in this case.

Dr. S. J. Smith reported an interesting case of labor, in which the cord was wrapped around the neck five times, and in which there was excessive hemorrhage. The baby was asphyxiated, but was resuscitated and did nicely. The cord was extremely long and thinly drawn out, with little of the jelly of Wharton.

Dr. Gantt reported a case of typhoid fever, in the second week of the disease, with a temperature of 102.2°, until a few days before when it returned to normal. The typhoid bacillus had been found. He desired information as to how soon the patient should be put on solid diet.

Discussing the case, Dr. Priester said it was generally agreed that such patients should be fed as soon as they could digest the food. Dr. King thought solid food would bring about a return of the fever. He questioned the pathological findings in this case. Dr. Brokaw suggested the regular typhoid fever diet for two weeks yet, holding that the patient would survive on this diet and no chances would be taken.

Resolutions of condolence on the death of the brother of Dr. A. J. Kyle and the father of Dr. S. J. Smith were read and adopted by the society.

Dr. Kirkham read the paper for the evening, which was variously and extensively discussed.

The Harris County Medical Society met in Houston March 13, with twenty-three members and one visitor present.

Dr. King reported a self-diagnosed case of cold in a child who had swallowed a metal coin (drink check) in which there were symptoms of croup with severe coughing spells. There was considerable dyspnoea, especially obstructed the breathing on expiration. There was some slight elevation of temperature, and a pseudo membrane on the epiglottis, a culture showing streptococcic infection. *X*-ray showed no foreign body present. There were rales in both lungs and considerable expectoration. There was considerable mucus and membranous shreds in the stools. Three other children in the family, one not exposed to the present case, all showed positive result in cultures from the throat.

Dr. E. F. Cooke thought the sore throat and the swallowing of the coin a matter of coincidence. He reported a case he had seen in which diphtheria was positively diagnosed and the antitoxin given, only to break out in a few days with a typical case of chicken pox. He had also recently seen a case of streptococcic sore throat, in which the patient died.

Dr. King stated he had given antitoxin in his case after the bacteriological examination and the *x*-ray, and that in four hours the child had become very much better.

Dr. K. H. Beall of Fort Worth, addressed the society, and commented particularly on the friendly spirit manifested among the profession of South Texas. He stated that the doctors of North Texas were not so deeply imbued with brotherly love. He extended a warm invitation to the Houston profession to visit the annual session at Fort Worth, stating that while Fort Worth did not expect to rival Houston, she would do the best under the circumstances to entertain her visitors.

Dr. W. W. Ralston read the paper of the evening, *Report of Interesting Eye Cases*. Case 1 was boy 2 years 8 months old. At the age of 7 months a glitter was noted in the right eye, followed by a tumor, which seemed to grow slowly until six months ago, when the same growth was noted in the other eye. Examination showed a large tumor occupying all of the globe, but apparently not outside. There was no exophthalmos and the lens was opaque. Behind the cornea there was a yellowish disk setting on a dirty gray yellowish mass. The eye was soft to the touch. The intraocular tension had been lessened by rupture in the optic nerve region; previous to this there had been considerable pain. The parents reported having previously lost a child from the same disease. Examination showed a typical picture of glioma. Prognosis, of course, is grave, and the only chance is for total enucleation of both eyes.

Case 2 was that of removal of a foreign body from the eye with a magnet, after location with the *x*-ray and proper incision.

Case 3 was that of twins 11 months old, in both of which there had been a discharge from the eyes since birth. The lachrymal glands were found to be infected, and were removed, the operation resulting in complete recovery.

Case 4 was that of a woman 61 years of age with abscess of lachrymal sac; not yet operated.

Case 5 was that of a woman 56 years old, who had been suffering from diabetes for several years, with from 5 to 8 per cent sugar. She was blind in both eyes, with lens swollen and opaque, and was growing gradually worse until in January, when she was operated upon, with the caution that the eye would probably not heal. Operation resulted in recovery of vision, 20/30, which will probably get better as the cornea dries up.

These cases were discussed by Drs. Bailey, Pulliam and Slataper.

Dr. J. H. Foster reported several cases, in which the ear, nose and throat were involved, and which resulted in mastoid complications, as well as other general involvements. These cases were discussed by Drs. Bailey, Pulliam and Hodges.

Application from Dr. Henry W. Waters of Montgomery, for membership in the society, was received and filed.

Harris County Medical Society met in Houston March 21, with fifty-one members and four visitors present.

The society accepted the invitation of the Majestic Theater to witness hypnotic exhibitions by "Dr. Pauline."

Dr. A. C. Scott of Temple, read a paper on *Superficial Cancer*. Dr. S. C. Red said that Dr. Scott's report of nine cases operated more than four years ago, with no recurrence, is the best he has ever seen. He discussed the etiology of the disease, and also the treatment. Dr. Montgomery recommended stabbing with actual cautery, which he claims gives good results. Dr. E. F. Cooke discussed the paper, and said there were three men in Texas who were connected in the minds of the profession with certain diseases, Woldert on malaria, Graves on typhoid and Scott on cancer. He is inclined to support Dr. Scott in his claims for the parasitic origin of cancer. Cancer cells once transplanted continue to grow, and the cells are not those of the tissue, but of the cancer itself. The serum of a cancer patient will digest the cancer cells. Dr. Eskridge reported a case of inoperable cancer she attended in 1909, using Gilheim's treatment. The youngest daughter, who was in perfect health at the time, nursed her mother. In 1912 the daughter was found to have uterine cancer. The uterus was removed. The home had not been renovated following the mother's illness, and the daughter had contracted the disease. Dr. King found it hard to harmonize the parasitic theory of the cause of the disease with

many of the latter day findings. He thought it unfortunate that doctors only come in contact with these cases after they have become well established. He believes that precancerous conditions do exist, and future study should be centered on them. Dr. Burton Thorning discussed the etiology of cancer, stating his understanding of late literature to be that a reasonable proportion of the cases were of parasitic origin. He stated that the heat treatment was used in cancer twenty years ago. Dr. Vanzandt discussed the application of the *x*-ray in precancerous conditions, calling attention to the readiness with which they yield to this treatment.

THE HARRIS COUNTY MEDICAL SOCIETY met in Houston March 27, with fifty-five members and one visitor present.

Dr. J. E. Hodges reported a case of intestinal obstruction in a patient 80 years of age, which was of three days' standing when he first saw her. Obstruction was due to ventral hernia, following an operation four years before for ventral fixation. When operated, on the fourth day, the bowel was found to be black and necrotic. Patient recovered, although she was suffering from chronic nephritis and chronic endocarditis.

Dr. Hodges also reported a case in which there was high temperature and pain on the right side, and in the right shoulder, with some delusion, which very much resembled the beginning of pneumonia. There was a chill, but little or no lung disturbance. Following the appearance of considerable redness over the right chest, shoulder and arms, erysipelas was diagnosed, and it developed that the patient had had several attacks of this disease before.

Dr. Hodges reported that he had written the State Secretary for opinion as to whether a county society could hold real estate, under its charter as a component part of the State Association. Letter from the State Secretary in reply was laid before the society, and the several legal questions involved fully discussed.

Proposition of having the society contract for handling the county practice as a body was fully discussed, and the committee enlarged and continued for further consideration of the subject.

A communication from the Chairman of the Board of Trustees of the State Medical Association, in regard to the proposal to appeal a case under the present lunacy law, and test its constitutionality, was read. Dr. Hodges stated that he had consulted attorneys and it would cost from $150 to $200 to test the law under this plan. The plan was to appeal a case under the old law and one under the new law, thereby obtaining opinions that would settle the entire question. After considerable discussion the committee having the matter in charge was discharged.

Dr. J. F. Gamble, Frank L. Barnes, J. C. Sellers and Charles D. Harwood were elected to membership.

The Secretary reported that thirty-four members had not paid dues, and that dues must be in hand before April 1.

Dr. Thomas of West, Texas, upon invitation, addressed the society.

THE WALKER COUNTY MEDICAL SOCIETY met April 13 at Huntsville. Seven members and one visitor, Dr. Sheppard of Terrell, were present. Dr. Eugene Baylis was received on transfer from the Grimes County Medical Society. The program was as follows: *My Own Experience in Producing Twilight Sleep*, Dr. N. W. Gustine, Hawthorne; *Compression Fractures of the Skull Demanding Immediate Surgical Interference, with Report of Five Cases*, Dr. Eugene Baylis, Huntsville.

SOUTHEASTERN DISTRICT—No. 10.

Dr. A. R. Sholars, Orange, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Victoria in April, 1915.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Hardin—Dr. Lee Selman, Olive; last Saturday monthly.

Jasper-Newton—Dr. D. McMicken, Kirbyville; 4th Wednesday quarterly.

Jefferson—Dr. B. P. Holland, Beaumont; 1st Monday monthly.

Nacogdoches—Dr. T. J. Blackwell, Nacogdoches; 2nd Wednesday monthly.

Orange—Dr. A. R. Sholars, Orange; 1st Tuesday monthly.

Polk—Dr. T. H. Bates, Camden; 1st Wednesday monthly.

Sabine—Dr. W. T. Arnold, Jr., Hemphill; 2nd Wednesday monthly.

Shelby—Dr. J. H. Windham, Shelbyville; 2nd Tuesday monthly.

EASTERN DISTRICT—No. 11.

Dr. Albert Woldert, Tyler, Councilor.

District Society—Dr. W. P. White, Henderson, President; Dr. J. B. Ramsey, Alto, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Anderson—Dr. E. B. Parsons, Palestine; 1st Monday monthly.

Angelina—Dr. J. C. Van Nuys, Lufkin; 1st Tuesday monthly.

Cherokee—Dr. T. H. Cobble, Rusk; 4th Tuesday monthly.

Freestone—Dr. E. V. Headlee, Teague; 1st Tuesday monthly.

Henderson—Dr. A. H. Easterling, Athens; 1st Mondays.

Houston—Dr. W. W. Latham, Crockett; 2nd Tuesday monthly.

Leon—Dr. V. L. Smith, Jewett; 1st Tuesday in April; 2nd Tuesday in October.

Panola—Dr. A. M. Baker, Carthage.

Rusk—Dr. W. P. White, Henderson; 2nd Tuesday quarterly.

Smith—Dr. L. P. Tenney, Troup; 2nd Tuesday monthly.

Trinity—Dr. W. H. Pope, Jr., Trinity; 3rd Thursday quarterly.

THE SMITH COUNTY MEDICAL SOCIETY met in Troup April 13. The meeting was largely attended by members of the Cherokee, Anderson and Henderson County Medical Societies, besides several visitors from Dallas and Palestine. The morning meeting was held in the K. of P. Castle Hall. Mayor Melton welcomed the visitors in a happy address. A midday banquet was served at the Melton Hotel. The afternoon session was held at the school auditorium, in the presence of the high school pupils. Dr. McReynolds, Dallas, made an address on the *Conservation of Vision*, and Dr. C. M. Rosser, Dallas, made an address on *Success*. Both were thoroughly enjoyed.

CENTRAL DISTRICT—No. 12.

Dr. A. C. Scott, Temple, Councilor.

District Society—H. C. Black, President; Dr. H. F. Connally, Waco, Secretary. Next meeting will be in Corsicana, July 13 and 14, 1915.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bosque—Dr. C. C. Cate, Morgan; 1st Wednesday.

Bell—Dr. L. R. Talley, Temple; 1st Wednesday quarterly.

Comanche—Dr. Charles Ory, Comanche; 1st Thursday monthly.

Coryell—Dr. Ed. Graves, Gatesville; last Wednesday bi-monthly.

Erath—Dr. S. D. Naylor, Stephenville; 2nd Wednesday bi-monthly.

Falls—Dr. Aug. Streit, Marlin; 1st Monday monthly.

Hamilton—J. H. Wysong, Hico; 2nd Wednesday monthly.

Hill—Dr. J. E. Boyd, Hillsboro; 2nd Friday.

Hood-Somervell—Dr. G. D. Ross, Paluxy; Wednesday before the full moon.

Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.

Limestone—Dr. M. M. Brown, Mexia; 3d Thursday bi-monthly.

Milam—Dr. G. B. Taylor, Cameron; 2nd Tuesday bi-monthly.

McLennan—Dr. D. L. Eastland, Waco; 1st Tuesday.
Navarro—Dr. W. D. Cross, Corsicana; 1st Monday.
Robertson—A. J. Sharp, Franklin; 2nd Tuesday bimonthly.

The Falls County Medical Society met in Marlin April 5 in regular session. Dr. S. S. Munger was elected to membership. During winter months the society has met regularly in Marlin twice a month. During the spring and summer months the meetings will alternate between Marlin and the neighboring towns. The topic for discussion was *Chronic Nephritis*. Dr. Frank Shaw read the paper of the evening. Dr. H. R. Dudgeon, Waco, opened the discussion. He said it was remarkable that this condition was not more frequent. Chronic nephritis is not an inflammation, but is due to an irritation. The cause of it can be traced to a faulty metabolism. Edema is usually caused by the parenchymatous form. The anasarca of the interstitial form is due to an accompanying heart disease. The symptoms are, rise in blood pressure, dizziness and roaring in the ears. Sometimes the condition is first detected in making a life insurance examination. The oculist may be the first to find the trouble. Often no increased frequency of urination. Patient thirsty. Asthma of later life can usually be traced to a nephritis. Another symptom often found is hemorrhage from the nose, throat, vagina, kidney or rectum. Hematuria is probably most frequent.

Dr. Aycock, Rosebud, stressed the importance of hot packs. He claimed very beneficial results from apocynum and infusion of digitalis.

Dr. Buie called attention to the danger of starving these patients. He is in favor of a more liberal diet.

Dr. Rice stressed the importance of avoiding sudden changes of temperature. He advises his patients to wear flannel winter and summer.

Dr. J. W. Torbett said that he believes that a new classification of kidney diseases will soon be given the profession. This will be based on the toxic substances causing the lesions. He uses the Carrel diet in these diseases—one pint of milk with one ounce of pecans and walnuts. He gets good results from hyoscine where patients are restless and nervous. This usually quiets them better than morphine.

The Hood-Somervell County Medical Society reports the following officers elected for 1915: President, Dr. H. L. Wilder, Glen Rose; Vice-President, Dr. T. H. Dabney, Granbury; Secretary-Treasurer, Dr. G. D. Ross, Paluxy; Censors, Drs. F. A. Collins, H. L. Wilder and A. R. Jarrett; Committee on Public Health and Legislation, Drs. W. B. Pruitt, E. L. Menefee and J. R. Lancaster. The time of meeting is the Wednesday before every full moon.

The Hood-Somervell County Medical Society met at Granbury, March 24. Nine members were present. Dr. W. F. Perkins, Tolar, was elected to membership. Dr. J. R. Lancaster reported an interesting case of obstetrics, which was discussed by Drs. Wilder and Walker. Dr. Walker reported a case of placenta praevia, which was discussed by Drs. Menefee, Pruitt, Lancaster, Jarrett, Gibbs and Ross. *The Effect of Pituitary in Puerperal Eclampsia* was discussed by all present. Dr. J. W. McFall presented a patient suffering with chorea. The next meeting will be held in Glen Rose April 28.

The Navarro County Medical Society met in regular session April 5 in Corsicana. Forty physicians and dentists were present. The following were visitors: Drs. W. D. Jones, Dallas; A. C. Scott and J. J. Terrill, Temple, and A. L. Lincecum, Assistant State Health Officer, Austin. After a sumptuous spread the meeting was called to order and the following program was rendered:

Dr. W. D. Jones, Dallas, gave a splendid address on *Medical Defense of the State Medical Association*, detailing the benefits that will accrue to members. He handled his subject well and answered all questions to the satisfaction of those present.

Dr. A. C. Scott presented a timely paper on *The Medical Profession from a Financial Standpoint*, which was well received and much enjoyed.

Dr. J. J. Terrill, Temple, presented a paper on *Some of the Indications for Making the Serum Test in Syphilis*.

Dr. A. L. Lincecum, Austin, who was on duty in the county in the Richland smallpox situation, talked on the *Enforcement of Vital Statistics Laws*.

After a vote of thanks for the many good papers from the visitors, the society adjourned at 1:30 a. m.

NORTHWESTERN DISTRICT—No. 13.
Dr. J. H. Ball, Crystal Falls, Councilor.

***District Society*—Dr. H. F. Leach, Weatherford, President; Dr. R. A. Duncan, Graham, Secretary.**

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Baylor—Dr. C. E. Johnson, Seymour; 2nd Tuesday.
Clay—Dr. B. M. Puckett, Henrietta; 2nd Wednesday.
Eastland—Dr. W. P. Lee, Cisco; 2nd Tuesday bimonthly.
Parker-Palo Pinto—Dr. E. A. Davis, Mineral Wells; 2nd Tuesday monthly.
Stephens—Dr. J. H. Ball, Crystal Falls; 1st Tuesday quarterly.
Throckmorton—Dr. D. C. Wylie, Throckmorton.
Young—Dr. W. H. Logan, Graham; 2nd Tuesday bimonthly.

The Throckmorton County Medical Society met April 5 at Throckmorton, with nearly the entire membership present. Dr. C. A. Turner read a very valuable paper on *Meddlesome vs. Do Nothing in Obstetrics, from a Country Physician's Viewpoint*. The paper was commended by everyone present. Dr. J. H. Ball, Crystal Falls, Councilor for the District, and Dr. B. F. Rhodes, Breckenridge, were present. It was voted that the Throckmorton County Society hold a joint meeting with the Stephens County Society in June, at Crystal Falls. Plans are being made to camp and fish on the beautiful Clear Fork, in addition to an interesting scientific program.

NORTHERN DISTRICT—No. 14.
Dr. A. W. Carnes, Hutchins, Councilor.

District Society—R. W. Baird, Dallas, President; Dr. H. L. Moore, Dallas, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Collin—Dr. B. F. Largent, McKinney; 1st Tuesday.
Cooke—Dr. J. R. Lewis, Gainesville; 2nd Tuesday.
Dallas—Dr. R. S. Loving, Dallas; 2nd and 4th Thursdays.
Delta—Dr. C. C. Taylor, Cooper; 1st Monday.
Denton—Dr. W. C. Kimbrough, Denton; Tuesday following 1st Monday.
Ellis—Dr. E. F. Gough, Waxahachie; 2nd Tuesday.
Fannin—Dr. E. H. H. Foster, Bonham; 2nd Thursday monthly.
Grayson—Dr. Davis Spangler, Sherman; 1st Tuesday.
Hopkins—Dr. J. H. Holbrook, Sulphur Springs; 1st Wednesday.
Hunt—Dr. M. L. Wilbanks, Greenville; 2nd Tuesday.
Kaufman—Dr. B. J. Hubbard, Kaufman; 1st Tuesday, February, April, June, August, October, December.
Lamar—Dr. W. W. Fitzpatrick, Paris; 1st Thursday.
Montague—Dr. C. F. Young, Bowie; 2nd Tuesday monthly.
Tarrant—Dr. J. J. Richardson, Fort Worth; 1st and 3rd Fridays.
Van Zandt—Dr. D. L. Sanders, Wills Point; 1st Friday.
Wise—Dr. L. H. Reeves, Decatur; 3rd Tuesday each month.

The Dallas County Medical Society met February 25. The following new members were elected: Drs. J. Trannie Smith, Jewel Daughty and C. H. Standifer.

Dr. W. T. Baker reported a case of persistent high

blood pressure, 230 to 240, without evidence of a cause in history or present findings.

Dr. W. M. Knowles reported a case in which a piece of steel about the size of screen wire had been extracted from the iris.

Dr. J. H. Dorman reported the case of a child shot through the head, the shot entering above one ear and emerging above the other ear. Recovery was uneventful, excepting a slight paresis of short duration.

The Dallas County Medical Society met March 25. Dr. J. B. Shelmire presented a patient on whom an amputation of the leg had been done some years previous for a supposed sarcoma of the bone. The patient exhibited evidence of old syphilis, and Dr. Shelmire was of the opinion that the supposed sarcoma was a gumma, as there had been no recurrence of malignancy. The case was discussed by Drs. Carrell, Dean and Smoot.

Dr. J. B. Smoot exhibited an excised gastric carcinoma which he believed had developed on the site of an old ulcer. This was discussed by Drs. Reeves and Carrell.

Dr. J. H. Dean reported a case of epidemic meningitis.

Dr. E. H. Cary discussed *The Use of Dionin Subjunctivally.* The subject was further discussed by Drs. Decherd, Taber, Wilkinson and Boyce.

Dr. A. B. Small read a paper on *The Vulnerability of the Cecum.* Discussed by Drs. Carrell and Reeves.

Dr. J. S. Turner reported for the committee that favorable replies had been received from the principal candidates for the new city administration regarding the proposed revision of public health laws, etc. The report was received and the committee retained. A resolution offered by Dr. Turner, favoring a complete revision of the health and sanitary code of the city of Dallas, was unanimously adopted.

The society passed a motion that a committee be appointed to take steps looking to the reorganization of the Physicians' Lunch Club.

The Dallas County Medical Society met April 8. Dr. J. B. Shelmire exhibited a penis which was amputated because of an extensive carcinomatous invasion.

Dr. W. A. Boyce exhibited a stone about the size of an ovary which he had removed from the position normally occupied by the ovary.

Dr. R. W. Baird reported a case of embolic pyemia of the lower extremities in a syphilitic. This report was discussed by Drs. Shelmire and Grigsby.

Dr. R. B. McBride read a paper on *The Clinical Significance of Hypertension.* The paper was discussed by Drs. Boyce, Grigsby, Baird, Worley and McReynolds.

Dr. T. C. Gilbert read a paper on *The Serum Treatment of Tetanus, with Report of Cases.* This paper was discussed by Drs. Nash, Grigsby, Crum and Smoot.

Dr. McReynolds presented a brief paper on *Gunshot Wounds of the Eye.*

Dr. T. V. Fryar was received on transfer from Navarro County. Dr. G. L. Carlisle was elected to membership.

A discussion of the subject of personal advertising was had without any action being taken by the society.

Dallas County Clinic Day Meeting.—The Dallas County Medical Society held one of its regular clinic day meetings Thursday, April 8, 1915, at the Baptist Sanitarium. The following visitors were present: Drs. J. K. P. Bowen, Grand Saline; V. B. Cosby, Grand Saline; W. C. Brown, Midlothian; J. W. Hill, Frankfort, Ky.; J. S. Tomkies, Dallas; C. C. Black, Royse City; C. D. Roberts, Dallas; W. D. Ellis, Plano. The following cases were presented:

Case I.—By Dr. Ellis of Plano. A farmer boy of 20; family history negative; always strong, never any serious sickness. Two years ago had light attack of typhoid fever. Stomach has not been well since, there being pain at times, but has gained in weight. Present illness began with a bad cold after being exposed to a cold rain four or five weeks ago. Slight rise of fever in afternoon since; some cough, spitting up a good deal at night and morning. Hemoptysis two weeks ago, an ounce or two. Has lost in weight. Appetite is good. Exertion brings on fever.

General appearance good. Pulse 86, temperature 99 1-5. Active tuberculous process in apex of right lung, incipient. Treatment recommended: Rest in bed in the open, nutritious diet, graduated exercise with temperature tests after prolonged stay in bed. Exercise to be increased later.

Case II.—By Dr. V. B. Cosby of Grand Saline. A. W., female, age 37. Father died at 32 of typhoid. Mother living and well. Patient had heat stroke twenty-two years ago, followed by bad health and cough for some time, when her health improved for a few years. Eighteen years ago she had typhoid fever. Sixteen years ago had hemorrhage from the lungs, was in bed for four weeks, no cough. In 1902 she had typhoid fever two months, followed by rheumatism and general edema. In September, 1914, began vomiting; could retain nothing. Pain in left side, temperature 100 to 101. Anasarca returned and remained severe until two weeks ago. Had dyspnoea when lying down and side cramped and felt heavy. Cough is very bad. Sputum not examined. Patient is emaciated, pulse 120, temperature 101. Diffuse rales in both lungs of the nature of active tuberculous process; heart enlarged, no murmur. Liver and spleen negative, pain in right side of abdomen extending toward bladder. Sputum showed no tubercle bacilli; urine contained albumen, pus, blood and casts, and an acid fast bacillus. Nose showed enlarged, inflamed turbinates, discharging pus; the choroids showed tubercles (doubtful).

In discussing the case Dr. Bowen of Grand Saline, said he believed there had been an abscess in the lung, rupturing into a bronchus, as very large quantities of pus had been expectorated at one time. Dr. Lehman advised a skiagraph of the chest and abdomen before being satisfied as to the diagnosis, although he believed there was tuberculosis in the lung; yet it seemed that the kidney lesion was more responsible for the patient's extreme condition.

Dr. A. I. Folsom believed the patient may have had a tuberculous kidney at one time and advised a cystoscopy.

Case III.—By Dr. A. M. Gantt, Dallas. Man, age 44, of a tuberculous family. Began last November with pain in the chest and hoarseness, cough, expectoration and dyspnoea on exertion. Physical examination shows pulse 108; temperature, 99.5; blood pressure, 120; rales in both lungs, and increased vocal resonance in apices. Treatment has been Von Ruck's vaccine and Burnham's Soluble Iodine. Patient is gaining in weight and improving generally.

Case IV.—By Dr. A. M. Gantt, Dallas. Boy, 16; father died of tuberculosis, otherwise family history negative. A year ago had a severe malarial attack, followed by measles. In January, after being exposed to rain, he began to cough and lose weight. In February he went to bed with a temperature of 105, pulse 140, with clinical symptoms of pneumo-

nia. Under treatment he was up in ten days. Examination of the chest shows a tuberculous process in the left lung. Treatment has been Von Ruck's vaccine, with steady improvement.

These cases were discussed by Drs. I. J. Morris, C. M. Grigsby, S. E. Milliken, C. W. Flynn, R. W. Baird, R. S. Loving, J. T. Watson and W. C. Brown of Midlothian, and H. B. Decherd.

Case VI.—By Drs. R. S. Loving, F. A. Pierce and J. H. Black, Dallas. Mrs. D., age 20; family history negative. A year and a half ago she had whooping cough and aborted. Afterward she gradually developed a bloody, foul discharge from the uterus which became constant and profuse. Six months ago she developed another cough. Expectoration was abundant, dark color, foul smelling and contained tubercle bacilli. The patient was treated in the County Tuberculosis Hospital. Physical examination showed dullness over both lungs, almost like consolidation, with some rales. A cavity was located in the lower part of the right lung. The uterus was curetted and the tissue examined, showing epithelioma. The patient died a month after entering the hospital. Post mortem by Dr. Black disclosed chorio-epithelioma invading all the uterus, and large metastatic foci over all the left lung. The right lung was occupied over all its extent with tuberculous processes, and there was a large cavity in the lower lobe.

Dr. F. A. Pierce, in discussing the chorio-epithelioma, could not say of how long duration it was, but thought this type of cancer very malignant, usually being fatal in about six months. The theory explaining their malignancy, he stated, was that the protection of the decidua being removed, the syncytial cell penetrates the tissues with great rapidity, eroding the blood vessels and being carried to other parts, where they become metastatic tumors. Dr. J. H. Black exhibited the lungs and uterus as found at post mortem.

Case VII.—By Dr. W. B. Carrell, Dallas. Negro man who had had a tuberculous synovitis of the elbow, on whom Dr. Carrell had done an excision, giving the joint a flail-like, but useful movement, with the removal of the focus.

Case VIII.—By Dr. Milliken, Dallas. This case was a woman upon whom Dr. Milliken had done a fusing of the spinous processes, according to the Hibb's procedure for the relief of kyphosis. The *x*-ray plates taken before and after the operation illustrated the result of the work. The case was discussed by Drs. Carrell and Doolittle.

The Hunt County Medical Society held an open session in Greenville April 13. The medical profession, lawyers, teachers, the ministry and the public in general, were well represented. The meeting was presided over by Dr. C. L. Gregory. Rev. A. A. Duncan delivered the invocation, and Dr. C. E. Cantrell the address of welcome. Hon. Morris B. Harrel responded. Dr. J. H. Crum, Dallas, delivered an illustrated stereopticon lecture on *Diphtheritic Antitoxin*, showing its production and administration, from the time the horse is injected to the final treatment of the child, and the patches in the throat.

Dr. C. H. Brownlee, State Hookworm Commissioner, delivered an illustrated lecture on *Hookworm*.

Dr. Joe Becton delivered an illustrated stereopticon lecture, *Specific Diseases of the Female*.

Dr. John R. Worley, Dallas, made the closing lecture, and gave in a very interesting manner the new method of applying anesthetics in the form of nitrous oxide.

This was one of the most interesting meetings the society has ever held, and everyone thoroughly enjoyed the occasion. It is the purpose of the society to have other public meetings in the future.

The Kaufman County Medical Society met in Kaufman April 6, with sixteen members present. Visitors: Dr. Loggins of Ennis, Drs. Baker, Hoffer and Stevens, dentists, and Gregory, veterinary surgeon.

The meeting was of exceeding interest, filling the time completely from 10 a. m. to 4 p. m. Subjects discussed were: *Anti-Narcotic Law;* paper by Dr. Shaw, *Gonorrhocal Arthritis in a Parturient*, with report of a case; paper by Dr. Holton, *Pleuritic Inflammations;* paper by Dr. Baker, dentist, *The Relation of an Unhealthy Mouth in the Treatment and Prevention of Systemic Disease.*

Cases were reported by Drs. Still, Watkins, Monday and Jarmon. Clinical cases were shown by Drs. Bishop and Pollard. Dr. Neely reported successful experiments in *The Artificial Impregnation of the Human Female.*

The society decided to have an outdoor picnic during the summer, and a committee was appointed to select the time and place and prepare the program, eatables and drinkables necessary for the occasion. The wives, daughters and sweethearts of the physicians to be the invited guests.

The next meeting will be held in Terrell June 1, at which time the entire society is invited to be the guests of Dr. Monday at luncheon, in his home.

NORTHEASTERN DISTRICT—No. 15.

Dr. W. H. Blythe, Mt. Pleasant, Councilor.

District Society—Dr. C. A. Smith, Texarkana, President; Dr. J. N. White, Texarkana, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bowie—Dr. E. M. Watts, Texarkana; 4th Friday.
Camp—Dr. R. Y. Lacy, Pittsburg; 1st Wednesday.
Cass—Dr. J. T. Herndon, Linden; 1st Wednesday.
Franklin—Dr. Z. C. Fuquay, Mount Vernon; 1st Tuesday.
Gregg—Dr. W. D. Northcutt, Secretary.
Harrison—Dr. J. B. Baldwin, Marshall; 1st Tuesday.
Marion—Dr. S. A. Miller, Jefferson; 1st Thursdays monthly.
Morris—Dr. R. C. Farrier, Omaha; 1st Tuesday quarterly.
Titus—Dr. W. H. Blythe, Mount Pleasant; 2nd Tuesday.
Upshur—Dr. T. S. Ragland, Gilmer; 2nd Tuesday.
Wood—Dr. V. E. Robbins, Quitman; last Friday monthly.

The Cass County Medical Society met April 7 in regular session. Dr. T. G. Howe, Douglassville, brought the County Hospital Law before the society, which was read and discussed by all. Dr. G. C. Abell, Texarkana, was present, and gave a talk on *Differential Diagnosis.* Those present at the meeting were Drs. J. H. Herndon, T. G. Howe, T. D. Ford, J. W. Shaddix, W. T. Stovall, R. L. Lumpkin and C. E. Davis. The next meeting will be held in Hughes Springs, June 2.

The Titus County Medical Society met in Mount Pleasant April 13, 1915, with Drs. Leftwich, Tabb, Johnson, Taylor, Miller, Grissom, Broadstreet, Fleming, Crabtree and Blythe present.

Dr. Broadstreet gave two very interesting clinics.

Dr. J. W. Johnson of Cookville, was elected to membership.

The greater part of the meeting was given over to the discussion of legislative matters, with the view of giving the Delegate some idea of the position of the society, as a body, in such matters.

Dr. Fleming was appointed chairman of the scientific program.

District Personal.—Dr. J. H. Taylor of Marshall, is quite ill.

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

FRANK G. SANDERS, President.....Fort Worth
W. H. HARGIS, Vice-President.....San Antonio
W. H. BLYTHE, Vice-President.....Mt. Pleasant
H. L. WILDER, Secretary-Treasurer.....Glen Rose

CHANGES OF ADDRESS.

Dr. I. L. McGlasson, from Galveston to Waco.
Dr. W. T. Hancock, from Remlig to Buna.
Dr. E. L. Ward, from Mathis to Albuquerque, N. M.
Dr. H. E. Hook, from Waco to Hubbard.
Dr. W. L. McNeil, from Arlington to Graham.
Dr. J. B. Ramsey, from Alto to Forest.
Dr. James Mann, from Fuqua to Browndel.
Dr. L. Faulk, from Yantis to Alba.
Dr. R. R. Longino, from Menard to Ft. Stockton.
Dr. H. A. Gilliam, from Petersburg to Lamesa.
Dr. F. W. Lawsen, from Orange to New Orleans, La.
Dr. J. C. Silliman, from Palestine to Palo Alto, Cal.
Dr. E. J. Ashcraft, from Kingsville to Buffalo.
Dr. F. E. Lindahl, from San Antonio to New Orleans,

FROM THE STATE SECRETARY.

County Secretaries are earnestly requested to see to it that their annual reports have been mailed to the State Secretary before the convening of the Annual Session, and in time to reach his office not later than the Saturday preceding. If this is not done, the State Secretary has no alternative but to report the society delinquent; he will undertake to make corrections up to the last minute, but cannot promise anything definite, for the reason that the duties of the hour are overwhelming as they are.

In this connection, the State Secretary is happy to announce that more members had paid dues by the 1st of April than had paid up to the 30th of April last year. Still, a number of societies are delinquent at this writing, April 20, and quite a few seem to have made very little effort to get a hundred per cent report. Hard times can hardly account for this failure, because it is a fact that more societies have made gains during this year than ever before since the years of reorganization.

Secretaries will also please see to it that their members understand that they cannot pay their dues at the Annual Session, except they are in possession of a note from their County Secretary authorizing the State Secretary to accept same, and receipt them therefor. This rule will not be departed from under any circumstances. It has happened heretofore that the State Secretary, acting upon the advice of those higher in authority, has accepted dues direct from members, to afterward find that the said members owed for more than one year's dues, were under charge of misconduct, or in other ways were not entitled to pay their dues and receive therefor unrestricted membership.

Secretaries are also reminded that the State Association of County Secretaries will hold an all-day session on Thursday, and attention is directed to their program, as printed in the April JOURNAL. This organization is in a position to do great good for the cause of organized medicine, and no county secretary, or councilor, as for that, who has the interest of the State Medical Association at heart, can afford to stay away or withhold his influence. Every county society in the state in a position to do so should see to it that its secretary attends this meeting, and that his expenses are defrayed by those for whom he works without hope of fee or reward.

Any county secretary who has a problem connected with his work as secretary, a solution of which is desired, will do well to communicate with Dr. H. L. Wilder, Secretary of the State Association of County Secretaries, at Glen Rose, who will undertake to see that a solution is forthcoming from some source, or that the problem is at least thoroughly discussed in open meeting, or by correspondence.

Delegates' credentials should be promptly filled out, a part sent in to the State Secretary *at once*, and a part given the delegate, as directed on the blank.

BOOK NOTES

FEDERAL NARCOTIC RECORD BOOK. A daily record of narcotics dispensed or distributed. Published by the Abbott Laboratories, Chicago. Price, 25 cents.

This is an exceedingly handy little book, and is designed to meet the requirements of the Harrison Narcotic Law, of which our readers are doubtless aware. It consists of blanks for the inclusion of the name, address, profession, license number, inventory of the narcotic drugs on hand March 1, and ample blanks for recording the amount of narcotics dispensed and distributed, ruled to give date, kind of drug, quantity, and patient's name and address. There is also included a discussion of the law itself, giving its application as the authors of the book understand it. It is unfortunate that the publishers could not resist the temptation to run advertising on the fly leaf, particularly when the character of this advertising matter is considered. Of course, the object of the Abbott Laboratories in getting out the book is not for the sake of the selling price, but in order to advertise their products. Many of our readers will resent having to pay 25 cents for a book advertising certain products that have been repeatedly declared unethical by our standards, established by the Council on Chemistry and Pharmacy of the American Medical Association.

A REFERENCE BOOK ON THE FEDERAL NARCOTIC LAW. For Physicians, Druggists, Dentists and Veterinarians. By Albert Dean Currier, of the Chicago Bar, and Daniel R. Forbes, late with U. S. Board of Food and Drug Inspection. Distributed by the National Association of Retail Druggists, No. 122 South Michigan avenue, Chicago. Price 25 cents.

This is a pamphlet of forty-five pages, containing the Harrison law in full, and a digest of the law and regulations pertaining to its application, by the authors already mentioned, who would seem to be in a position to pass upon this rather intricate problem that is before us. The pamphlet bears date of March 29, 1915, which is late enough to give the latest rulings, and a casual reading would seem to warrant the assertion that they have done so in a rather comprehensive manner. There is appended a list of the commonly used drugs affected by the law, which will prove of considerable advantage to the practicing physician and all of those affected. There is also an index, which is ample for the purposes in hand.

BOOKS RECEIVED.

Federal Narcotic Record Book. (Abbott Alkaloidal Co.)

Federal Narcotic Law. *Forbes-Currier.*

Diseases of the Skin. *Ormsley.* (Lea & Febiger.)

Practical Medicine Series, 1915. General Medicine, Vol. 1.

GEORGE H. MOODY, M. D.
SAN ANTONIO, TEXAS
Forty-Eighth President State Medical Association of Texas

Texas State Journal of Medicine

HOLMAN TAYLOR, EDITOR-IN-CHIEF.
EDITORIAL OFFICE: Western National Bank Building, Fort Worth, Texas.

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VOL. XI. JUNE, 1915 No. 2

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

DR. G. H. MOODY.

As will be noted elsewhere, Dr. G. H. Moody of San Antonio, was elected President of the State Association at the Fort Worth Session, and we are pleased to present herewith an excellent likeness and a brief biagrophy of our new chief. Dr. Moody was born in Mexia, Texas, May 12, 1872. His father, James I. Moody, died in Groesbeck, Texas, in 1899; his mother, Mrs. Eureka Moody, is still living in Groesbeck. Dr. Moody attended the public schools of Limestone county and subsequently Southwestern University at Georgetown, Texas. He took his degree in medicine in Tulane University, New Orleans, in 1896, following which time he practiced his profession in Mexia. From Mexia he went to Austin to accept a position as assistant physician to the State Lunatic Asylum. From this position he was promoted to that of First Assistant Superintendent of the Southwestern Insane Asylum at San Antonio, May 1, 1903. His service in the asylums of the State attracted his attention to nervous diseases and phychiatry, and he continued the study of these subjects in Europe for an extended interval. Returning to San Antonio in 1903, he established a sanitarium for the treatment of nervous and mental diseases, which he has conducted continually since that time, limiting his practice to mental and nervous diseases. He has taken graduate work at intervals in the New York Post Graduate Medical School, New York Neurological Institute and Bellevue Psychopathic Hospital. He is a member of the American Medico-Psychological Association, and has been active in the production of current literature on the subjects covered by his specialty.

Dr. Moody's connection with organized medicine is concurrent with his opportunities. He has been an active worker since the reorganization, and has been an honored and consistent member of every high grade medical organization within his reach. He has served as president of his county society, the district society and the Medical Association of the Southwest. He is a fellow of the American Medical Association, and has attended many of its meetings, participating principally in the scientific proceedings.

Dr. Moody has been active likewise in civic life, being at the present time a member of the San Antonio Chamber of Commerce, and having at one time served as a member of the Board of Health of San Antonio. He is a Mason of high degree, an Elk and a Rotarian.

In 1907, Dr. Moody was married to Miss Bebe Denman of San Antonio, who is as well known in the profession almost as Dr. Moody himself. There are two sons, Geo. H. Jr. and Leroy Denman.

We feel that it is quite necessary for us to indulge in eulogistic comment, as the character of the subject of this sketch is an open book to the medical profession of this State, in which there is no blot or strain. His genial and wholesome personality has endeared him to the membership generally and there is widespread satisfaction that the honors and responsibilities that go with the "real head of the profession in the State," have been worthily and properly bestowed.

THE FORT WORTH SESSION.

As had been anticipated, the Fort Worth Session eclipsed all previous efforts in the

matter of attendance and general interest. Comparison in this instance is not invidious, as Fort Worth is nearer the center of medical population of this State than any other community, except its sister city, Dallas. The registration reached the unprecedented number of 1,008, which is practically one-third of the entire membership of the Association. This is an increase of nearly one hundred over the Houston registration, which was the record up to that time. It is estimated that at least a hundred others attended the meeting from time to time, from nearby cities, who failed to register. Not alone from the standpoint of registration is there cause for congratulation. It seems that interest in all of the activities of the Association was unusually great, and the entertainment features provided were joined in with a zest quite remarkable. It is also worthy of remark that peace and harmony prevailed generally and the heretofore much criticized political activities were not so much in evidence. Hotel facilities were ample, which is a matter worthy of comment and which was a surprise to the local profession, no less than to the visitors, who had expected somewhat of a deficiency in that respect. On the whole, the meeting was a pronounced success, and much enjoyed by all who attended.

The entertainment features were in some respects rather unique. On Wednesday evening practically the entire attendance, with as many friends as were desired, were disposed comfortably around more than 250 tables on the sawdust floored arena of the great Coliseum, and served with a bountiful repast of barbecued suckling pig, baked gosling and all of the usual harmonizing dishes, not to mention hundreds of bottles of grape juice and other juices that were equally a delight to some and an abhorrence to others. A stage had been provided on one side of the arena, upon which a well selected line of vaudeville was presented during the evening. Owing to the unprecedented and unexpected attendance, there was ultimately a scarcity of food, and at the expiration of the vaudeville program those who cared for the pastime, repaired to the Metropolitan Hotel where a dance program was indulged in until an hour rather later in the night than should be approved of by physicians. The entertainment for the visiting ladies was aside from this occasion and consisted of the usual automobile rides, receptions and musicals, all of which seemed to have been well managed and thoroughly enjoyed.

There were a number of special incidents arranged for passing entertainment, of which the following is a sample: During the opening session, the Chief of Police called to the stand a number of prominent and well known members of the Association, and invested each of them with a commission as city police, with rank ranging from Chief up to Patrolman, of which latter there was only one, Dr. W. B. Russ of San Antonio. A large tin star, with the rank painted thereon in large letters, was pinned on each of the new policeman with a safety pin, which latter was said to have some significance bearing upon the slogan, "Safety First." During the session, these special policemen created considerable diversion through the opportunities thus extended them. The President, Dr. Boyd, was arrested for negligent homicide; he is said to have killed Father Time. Other prominent members of the Association were arrested for other crimes and misdemeanors, all of which incidents were given due prominence. These are mentioned because it is of importance to know that physicians are just as human, just as lively and full of fun as any other class of citizens, and are coming to realize that fact.

The public health meeting held on the evening prior to the opening session, proved to be the most successful of any heretofore given at any annual session. Dr. W. C. Rucker, Assistant Surgeon General of the United States Public Health Service, delivered an illustrated lecture on the general subject of bubonic plague, and the measures recently taken in New Orleans to suppress the outbreak of this dread disease at that point. The large Baptist church was crowded to the limit, and interest was sustained to the last word. The occasion had been well advertised, the lecture was of interest, and altogether the occasion was a notable event in the history of public health education in this State.

The memorial exercises on Tuesday evening, were likewise eminently successful, and seemed to answer the purposes of the occasion more nearly than is usually the case. There were two splendid memorial addresses, by Drs. C. M.

Rosser of Dallas and Fred J. Mayer of Opelousas, Louisiana, the latter of which was intended and did take the place very largely of a public health address. The exercises were unfortunately delayed somewhat by circumstances over which the Chairman had no control, but despite the lateness of the hour and the extended program, the large audience remained to the last, and appeared to be highly entertained. The musical program was beyond criticism, and the several numbers were repeatedly encored. This feature of the occasion was arranged by Miss Hope Chase. The program was as follows:

Invocation—Rev. A. F. Carr, D. D.
Evening Prayer in Brittany.....*Chaminade*
Euterpean Club Chorus
Piano—(a) Love Dream
(b) Ab Major Etude
.....*Liszt*
Miss Augusta Bates
Eulogy—Dr. C. M. Rosser, Dallas
Violin—(a) Air .....*Bach*
(b) Minuet .....*Beethoven*
Mr. Josef Rosenfeld
Voice—Amour-Viens Aider (Samson and Delilah)
.....*Saint-Saens*
Miss Anita Laneri
Accompanied by the Rosenfeld String Quartette
Address—The Family Physician in Memoriam
Dr. Fred J. Myer, Opelousas, La.
Song of the Rhine Maidens.....*Wagner*
(From Gotterdammerung)
Euterpean Club Chorus and String Quartette

There were a number of distinguished guests in attendance on this occasion, all of whom seemed to enjoy the occasion. Some of them will be recognized as having been with us on former occasions, the presence of whom on this occasion serves to demonstrate a mutual regard certainly pleasing to us. It is a matter of no small consequence to these busy physicians to be called upon to leave their work and entensive connections for the purpose of attending a State Association meeting, to say nothing of the expense such a trip involves, and we feel particularly honored that such a large number of such eminent physicians should have accepted our invitation for the occasion. The list of guests follows:

Dr. W. C. Rucker, Washington, D. C., Assistant Surgeon General of the United States Public Health Service; Dr. W. W. Grant of Denver, Trustee of the American Medical Association; Dr. Oscar Dowling of New Orleans, President, and Dr. Seale Harris of Mobile, Secretary of the Southern Medical Association; Dr. Fred J. Mayer of Opelousas, Ex-President of the Louisiana State Medical Society; Drs. Albert H. Andrews and Joseph C. Beck of Chicago; Dr. Fred C. Zapffee of Chicago, Secretary of the Association of American Medical Colleges; Dr. F. W. Parham of New Orleans; Dr. Wm. C. MacCarty of Rochester, Minn.; Dr. Edward H. Skinner of Kansas City; Dr. Frank A. Jones of Memphis, Tenn.; Dr. M. Smith, Oklahoma City, Fraternal Delegate from the Oklahoma State Medical Society and former Councilor of the North Texas District of the State Medical Association of Texas; Dr. W. O. Talbot, Fort Worth, Fraternal Delegate from the Texas State Dental Association; Dr. A. O. Lundell, Fort Worth, Bureau of Animal Industry, Department of Agriculture; Mr. John B. Hawley of Fort Worth; Dr. J. T. Halsey, New Orleans, Fraternal Delegate from the Louisiana State Medical Society, and Dr. W. L. Heiser, Bowling Green, Fraternal Delegate from the Kentucky State Medical Association.

Quite an interesting departure from custom was the scientific exhibit, and it is a genuine pleasure to state that the experiment was a pronounced success. Under the direct supervision of Drs. Brewer, Bond and Goodman of the committee, an instructive and entertaining array of pathological specimens, *x*-ray plates and original research matter was arranged in the commodious balcony of the auditorium, above and surrounding the commercial exhibits. Of special interest was the magnificent display of pathological specimens from the Fort Worth station of the Bureau of Animal Industry, in which there were 54 items, and accompanying which was a printed catalogue, fully descriptive. This exhibit was demonstrated by Dr. A. O. Lundell, who was an invited guest of the Association, and who presented a paper bearing on the subject, before the Section on State Medicine and Public Hygiene. The value of Government inspection of our meat supply could be demonstrated in no better manner, and this particular exhibit was illuminating and convincing, to say the least of it.

The commercial exhibits were displayed on the floor of the large auditorium, and together with the scientific exhibits, the registration office and information bureau, made a lively center, around which the various activities of the Association revolved. We can truthfully say that never before has the Association been favored with such an interesting and instructive line of commercial exhibits, and certainly no exhibit of this character in this State has ever before received such generous

attention. We congratulate the committee in charge of this exhibit, and the exhibitors themselves, for the splendid showing made. The list of exhibitors follow:

1, F. A. Hardy & Co., Dallas, Optical Instruments, etc., represented by Mr. T. V. Murray and others; 2, 4 and 5, A. P. Cary & Co., Dallas, Surgical Instruments, represented by Messrs. Geo. L. Moore, R. C. Lawson and J. Pratt Irby; 3, Weder Mfg. Co., Philadelphia, The De Lyte Surgeon Electric Diagnostic and Illuminating Set, represented by Mr. and Mrs. Chas. Wolff; 7, Western Indemity Co., Dallas, Insurance, represented by Mr. C. S. McDonald; 8, Taylor Instrument Company, Rochester, N. Y., Blood Pressure Instruments, represented by Dr. W. H. Cowing; 9, Carlsbad Mineral Water, Mineral Wells, Texas, Mineral Water, represented by L. E. Cowling; 10, McDermott Surgical Instrument Co., New Orleans, Surgical Instruments, represented by G. H. Ringler; 11, Horlick's Malted Milk, Racine, Wis., represented by Mr. C. J. Polman; 12, Welch Grape Juice Co., Westfield, N. Y., "The National Drink," represented by Mr. R. Dunlap; 13, W. B. Saunders and J. A. Majors Co., New Orleans, Medical Books, represented by Mr. J. A. Majors and Mr. Geo. Henser; 14, Merry Optical Co., Dallas, Optical Instruments and Supplies, represented by Mr. Hunter and Mr. Hugh Campbell; 15, Crazy Wells Water, Mineral Wells, Texas, Mineral Water, represented by Mr. Stone; 16, C. V. Mosby Book Co., St. Louis, Mo., Medical Books, represented by Dr. C. V. Mosby and Dr. W. N. Stark; 17, Sharp and Smith, Chicago, Surgical Instruments, represented by Mr. M. P. Whitten; 19, Geo. H. Chase Co., Fort Worth, Surgical Instruments, represented by Miss Mae White; 20, 21 and 22, Kirby Instrument Co., Dallas, Surgical Instruments and Pulmotors, represented by Mr. E. H. McClure; 23, Uncle Sam Breakfast Food Co., Omaha, Nebraska, Breakfast Food, represented by Mr. John Lee; 24, Geo, R. Pilling and Son Co., Philadelphia, Blood Pressure Apparatus, represented by Dr. Harley Stamp; E. T. Renfro Co., Fort Worth, Cigars and Drugs, represented by Mr. Sun Set Cox.

THE BUSINESS SIDE OF THE SESSION.

The facility with which the House of Delegates dispatches its business is becoming quite marvelous. We are just now beginning to really appreciate the saving in time and trouble resulting from our committee system of doing business. While it is true that the many in this respect save at the expense of the few, the few are amply repaid in the knowledge that they have contributed an unusual amount to the general good, and allowed the greater number more latitude for general purposes. This is true within the House of Delegates as a body, to the extent that it is true in the Association as a body. The committees are presumed to thrash out the several problems presented to them from an unbiased standpoint, presenting their conclusions, together with the original item, to the House of Delegates subsequently, saving the time that would otherwise necessarily be taken in deliberation.

The minutes of the several meetings of the House of Delegates will be found under another head in this number of the JOURNAL, and we are hopeful that our readers, and particularly those who are interested in the welfare of the Association and organized medicine generally, will give this account careful reading. Certainly those who were members of the House of Delegates should do this, not only with a view to fixing in their own minds the various transactions, but for the purpose of searching out any possible errors, that they may be corrected. This is the history of the Association, and no effort should be spared to keep the record straight. Some of the important transactions and items worthy of attention, will, with the indulgence of the reader, be briefly pointed out.

Particular attention is directed to the annual reports of the Secretary and the Board of Trustees, the latter embracing the report of the auditor. It will be noted, among many other items of importance and interest, that the membership for the opening day of the session was 3,365, an increase of 154 over the opening day of the previous annual session, 230 and 513, respectively, over the two previous years. This is particularly pleasing because it was anticipated that the war time depression and the increase of the annual dues incident to the inauguration of Medical Defense, would prove somewhat inhibitory in this respect. The auditor's report shows a most pleasing state of affairs from a financial standpoint, the net profit for the year's operation being $1,606.66. This is aside rom the medical defense fund. There is a total of $18,151.72 in the bank at the present time, drawing 6 per cent interest. This balance practically amounts to a permanent investment, and that it is a paying one is demonstrated by the amount of the interest account, $690.84. It may be pointed out that very few investments net more than 6 per cent, certainly very few of the so-called gilt edge

investments. This deposit is secured by an ample, personal bond, which makes it as safe an investment as could well be found.

The extraordinary size of the JOURNAL during the previous official year, and the fact that it was a legislative year, makes it all the more a matter of congratulation that the finances are in such a healthy state. We pause long enough to point out the fact that the advertising income was at the same time materially increased, the increase amounting to $1,013.13. Is it necessary to add any argument to this statement in order to convince our members that their opportunity lies in the direction of the advertiser?

The success of the first year of Medical Defense is likewise a matter for congratulation. A careful study of the report of the Council on Medical Defense will repay any member who is interested in the subject, and who may happen to have a prophetic spirit. It seems that there were six suits actually participated in by the Council, and several threatened suits dealth with. It is the opinion of the Council that as much, almost, will be accomplished in the way of preventing suits as in winning them. The balance to the credit of the medical defense funt at the end of the year was $2,665.64. It is the intention of the Council to permit this balance to reach a point where the cost of defending members in malpractice suits will be guaranteed, following which happy state of affairs the accumulation will be turned to the prosecution of medical pretenders and illegal practitioners. The policy is announced of beginning this latter work by contributing assistance first to the smaller communities, permitting the larger communities to take care of themselves.

One other feature is worthy of comment. The Council has made co-operative agreement with one mutual and two strong old line indemnity companies, through which those of our members who care for a money guarantee against loss from malpractice suits may secure the same without forfeiting any of the great advantages of Association defense. Incidently, the cost of defending suits under such an agreement will be materially reduced for all parties concerned, and there can be no doubt but the combination of interests will prove highly beneficial to all of us. We believe this plan of co-operation is peculiar to our Association, and was originated by us. We heartily commend the idea to other Associations that are operating a medical defense department.

The President's message is a document of some considerable importance in that it is very largely the instrument by means of which the policy of the Association is shaped. The President had some very pertinent remarks to make concerning the committee plan of government, and his suggestions in this respect were adopted by the House of Delegates. He recommended that the Monday preceding the opening session be devoted to conferences of the official family, and that the evening of the same day be devoted to the matter of public health education, and that the day be called "Official Conference and Public Health Day." This suggestion was commended and passed up to the next administration. Plans for lessening the burden of entertaining the Annual Sessions were discussed, and the idea advanced that those who were to be entertained should by means of a registration fee pay the cost of the entertainment. His arguments bearing on this phase of the situation are good, but the House of Delegates were a little afraid to make the innovation at the present time. It is pointed out that but few communities in the State are at the present time so situated that they can entertain the Annual Session, and it is anticipated that the present cost of entertaining will very soon become a burden by virtue of the frequent rotation. The subject will doubtless continue to receive consideration, and a solution of the problem will be forthcoming in due time. The House of Delegates adopted the suggestion of the President and the Secretary, that the proposed amendments to the Constitution and By-Laws of the American Medical Association, relating to the extension of jurisdiction over State Associations, be dealt with rather carefully, in view of the present unstable situation as it relates to uniform standards for membership. This is a question not easily understood except by those thoroughly familiar with the situation, and the Southern States will likely go slow in this matter until they are assured that the race question will not intrude itself, with all of its disorganizing and disagreeable features. The need of a strong central, high court of appeals is well understood, and

doubtless Texas will be among the first to indorse a feasible plan for the establishment of such a tribunal.

Partly upon suggestion of the Committee on Defectives and Dependents, and in answer to a resolution submitted by the La Salle-Frio County Society, the Association again went on record as favoring medical inspection of public schools, and compulsory vaccination. The Harrison Anti-Narcotic Law was commended, with additional suggestion that better provision be made by municipalities for the treatment of the unfortunate pauper addicts. The farm for feebleminded dependents recently provided for by the Legislature was commended, and the present overcrowded condition of the insane asylums and the number of unfortunate insane incarcerated in jails, was again called to the attention of the public. The general principle of sterlizing defectives was also indorsed.

Our representative to the National Council on Medical Education made a very interesting report, calling our attention to the 5th or intern year, recommend, and in some places adopted, as a prerequisite to medical licensure, and to the abolishment by the Council on Medical Education of the class A plus grade.

The House of Delegates went on record as favoring a reduction of the penalty for violating the vital statistics law, as recommended by the Section on State Medicine and Public Hygiene, on the ground that the present penalty is so great that the authorities hesitate to prosecute under the law.

Our scientific committees seem to have acquitted themselves with much credit, and attention is called to the report of the Committee on the Study of Cottonseed Meal, to be found in the Transactions, and to the reports of the Committees on the Study of Cancer, Pellagra and Veneral Diseases, to be found among the original articles at a later date.

A complete revision of the Constitution and By-Laws of the Association was effected at this meeting, and the revised version appears in the Transactions, in this number of the JOURNAL. They will be reprinted, and in that manner preserved for future use. In the meantime, every member of the Association will have a copy in his JOURNAL, and it should be preserved.

The following officers were elected for the ensuing year: President, Dr. G. H. Moody of San Antonio; President Elect, Dr. J. M. Inge of Denton; Vice-Presidents, Drs. M. F. Bledsoe of Port Arthur, H. C. Black of Waco and T. D. Frizzell of Quanah; Trustee, Dr. W. R. Thompson of Fort Worth (re-elected); Councilors, First District, Dr. F. P. Miller of El Paso, (re-elected); Fourth District, Dr. S. C. Parsons of San Angelo (re-elected); Seventh District, Dr. C. C. Nash of Palestine; Thirteenth District, Dr. C. B. Williams of Mineral Wells; Fourteenth District, Dr. A. W. Carnes of Hutchins (re-elected); Delegates to the American Medical Association, Drs A. B. Small of Dallas, Holman Taylor of Fort Worth (re-elected), and M. M. Carrick of Dallas; Alternate Delegates to the American Medical Association, Drs. Frank Paschal of San Antonio (re-elected); E. H. Cary of Dallas (re-elected), and John H. Foster of Houston; Council on Medical Defense, Dr. E. F. Cooke of Houston (re-elected). Place of meeting, Galveston. Time of meeting, not decided upon.

IMPORTANT CHANGES IN THE CONSTITUTION AND BY-LAWS.

Taking them as they come, the principal changes in the Constitution and By-Laws are, briefly, as follows:

Hereafter there will be no doubt as to who may become "Guests" of the Association. Any eminent man of science, whether of medicine or not, outside of the State, and any eminent man of science within the State who is not eligible to membership in the State Medical Association, may be thus invited, and none other.

Members of the Council on Medical Defense and of the New Council on Legislation and Public Instruction, will hereafter have seats in the House of Delegates with the right to vote. The County Society Investigation Committee, has been abolished except when called for by the Council, and when used at all will report only to the Council.

District societies must hereafter confine their membership to members of county societies within the limits of their districts; they will likewise confine their effort to scientife and educational ends exclusively.

Hereafter a President Elect will be selected each year, instead of a President, and he will take office at the next annual session. It is

further provided that should the President be removed from office, that the President Elect shall serve in his stead until the Board of Councilors can elect a successor from among the three Vice-Presidents, the election to take place within ten days from the date of incapacity of the President.

Hereafter the terms "Session" and "Meeting," will be better understood. Each of the Sections, the House of Delegates and the general body, will hold "meetings" from day to day, but the entire group will be denominated as a "session."

The House of Delegates is authorized to select the time and plaee of meeting, but should it fail to do so, or should it desire to so direct, it becomes the duty of the Board of Trustees to assume this function. It is furthermore provided that the Board of Trustees may, for good and suffieient reasons, change both the time and place of meeting, even though that matter had been settled by the House of Delegates.

The general subject of referendum (without the recall) has been eleared up, and hereafter it will be an easy matter to determine the necessary procedure should anyone, perchance, desire to fall back upon the panacea for ring rule.

The subject of delinquency has been definitely defined, and it is now clear that any member who has not paid his dues, stands delinquent as from January 1st, if his secretary fails to report him as in good standing at the time the annual report should go in, March 1st. This has an important bearing in the matter of medical defense.

Henceforth no member of the Association who has solicited votes, will be considered eligible to any office within the gift of the Association.

The entire chapter relating to the Board of Councilors has been carefully rewritten, and the new position of Vice-Councilor has been provided for. Councilors of large districts may request the appointment of Vice-Councilors, the said Vice-Councilors not to be entitled to a seat either on the Board of Councilors or in the House of Delegates. They will work exelusively under the direction of their councilor, and their expenses will be allowed by the Board of Trustees. The State Secretary is required to issue charters under the direction of the Council only, and the Council is given the authority to forfeit the charters of any society which it may consider has violated either the spirit or letter of the law.

There has been a marked change in the matter of committees. Hereafter there will be three types of eommittees, namely, standing committees, special committees and reference committees of the House of Delegates. The standing committees have been reduced to five and the membership of each committee materially reduced. The duties of these committees are also clearly set out. The Committee on Public Policy and Legislation has been elevated to the dignity of a Council, and the title changed to that of "Council on Legislation and Public Instruction." The President and Secretary are retained as *ex-officio* members of this Council, and the other three members will be selected for a term of three years each, so that a new member may be added each year. This is deemed an important step in the right direction, and a measure of efficiency.

Hereafter it may be definitely known that no commercial exhibit will be allowed in our annual sessions, that is not thoroughly acceptable to the advertising pages of the JOURNAL There has been little difficulty heretofore in preventing the exhibition of unethical medicinal products, but in other respects there have arisen eircumstances not subject to control without embarrassment.

No social function will be permitted to conflict with any part of the official program, and the official program may not be altered in any particular, except by vote of a General Meeting. The new "Section on Life Insurance" has been so designated. The essential rules governing the transactions of scientific sections have been enacted into law, which will be helpful to section officers and those who would have order in all things.

A county society must report a membership of five in order to hold its charter. The fiscal year of a eounty society is made definitely to coincide with the calendar year, and the county secretary is required to account for every physician practicing in his county during the preceding official year.

It is quite probable that the Constitution and By-Laws are yet faulty, but the arrangement

is at least consistent, and many known defects have been corrected. Members are urged to consider the new version carefully, and should any provision thereof appear to require amendmending, the matter should be called to the attention either of the State Secretary, the county society delegate or the President, any of whom will doubtless take pleasure in looking into the matter.

THE A. M. A.—SAN FRANCISCO OFFICIAL ROUTE.

Upon the advise of the Transportation Committee, the House of Delegates selected the T. & P. Railway to El Paso, and the Santa Fe from El Paso *via* Albuquerque, Grand Canyon, San Diego and Las Angeles, to San Francisco, as the official route to the annual session of the American Medical Association and the great expositions to be held in San Diego and San Francisco. The return portion of the ticket may be arranged for a number of combinations, but the committee recommended the Western Pacific and Denver and Rio Grande, by way of Salt Lake City and Denver, including the Feather River Canyon of California, Glenwood Springs and the Royal Gorge, Pike's Peak and the other wonderful scenic products of Colorado, returning from Denver by any road that meets the fancy of the individual.

The official party will leave Fort Worth Sunday, June 13th, 10 a. m., arriving El Paso 9:30 a. m. on the 14th, and spending the day in El Paso and across the line in Juarez; depart for Grand Canyon 8 p. m. on the 14th, arriving 6:50 a. m. on the 16th; leave Grand Canyon 7:40 p. m. on the 16th, and arrive in San Diego 6:40 p. m. on the 17th; spend the 17th and 18th visiting the fair at San Diego, and the 19th in Los Angeles, arriving in San Francisco 9:40 a. m. of the 21st, in ample time to meet with the House of Delegates, or get the lay of the land before the opening session Tuesday morning.

It is planned at the present time to join our party to the regular American Medical Association Grand Canyon Special at Albuquerque, and spend the balance of the time with that party.

The round trip "Special Excursion" ticket will cost $52.50 from Fort Worth, with minor variations for other points in the State. The side trip to San Diego will be free, but the Grand Canyon coupon will cost $7.50 extra. Those who contemplate making the trip should see to it that this coupon is added, as the trip is well worth the time and money necessary to make it.

A special through Pullman will be furnished for 25 fares, and it is anticipated that little difficulty will be experienced in getting this number. Those who desire accommodation should without delay either write or wire Mr. J. F. Zurn, D. T. and P. A., T. & P. R. R., Fort Worth, for Pullman reservations. It would seem that no more desirable trip could be arranged for, and it is a long and lonesome way to San Francisco.

It is hardly worth while to discuss the desirability of attending either the annual session of the American Medical Association or the two great Pacific Coast fairs, as doubtless every member of the Association has made up his mind already whether he cares to make the trip or not, and there would seem no reason why, if the San Francisco trip is to be made at all, it should not be made at the time of the annual session of the American Medical Association.

PRESERVE THIS NUMBER.

This number of the JOURNAL contains much valuable data, and should be preserved ready at hand, by every member of the Association. It may at any time become desirable, even necessary to know definitely concerning the transactions of the last Annual Session, particularly as to the new laws there enacted, and doubtless nearly every member of the Association will have occasion at some time during the year to ascertain whether some physician at a distant point is a member of the State Association. The Transactions and the list of membership here presented will prove invaluable, if preserved. It is a simple matter to place the single number in a piegon hole, or in the top drawer of the desk or at some other place where it will not likely be in the way or be disturbed, and our word for it, time will demonstrate the advantage of this little bit of forethought.

The State Secretary has very carefully edited and arranged the transactions, and indexed them, so that any particular item may be easily traced; and much care has been bestowed upon the compilation and arrangement of the list of membership. We are hopeful that this year there will be found no mistakes in either one, and we trust that any error or mistake discovered by others will be immediately called to our attention. PRESERVE THIS NUMBER!

ORIGINAL ARTICLES

DEVELOPMENT OF AMERICAN MEDICINE.*

BY

FRANK D. BOYD, M. D., F. A. C. S.,

FORT WORTH, TEXAS.

In selecting the matter for a "President's Address," I feel that I can do nothing more fitting than to present an outline of the history of medicine in America. Personally I have enjoyed the reading necessary to gather the data, and while I am proud of the record and achievements of our profession, there is so much yet to be done that I feel we should not be content, but push on with even greater zeal to greater deeds.

The history of medicine in America commences with the early struggles of the American Colonies.

Undoubtedly the first physician in what is now New York, was Lamontagne, a Huguenot, who arrived in 1637, and who seems to have been a man of great capability for his time. During that time it appears that men of no little science left the Old World for the New, and the medical services which they received here were doubtless on a par with that received at home.

About this time a number of young Americans went abroad to study medicine, Leyden, Paris, Padua and the British universities being the institutions of learning most eagerly sought. In 1637 a public college was established in Cambridge, Massachusetts, and in 1638 the Rev. John Harvard left his library and one-half his fortune to this institution, after which it was called Harvard College. William and Mary's College was chartered in Virginia in 1693. Probably the first lectures on anatomy in this country were those of Giles Firmin, previous to 1647, at Harvard College. It was in this early day that there arose the custom, continued until very recently, of studying medicine under a preceptor.

In 1636 the Assembly of Virginia passed a fee bill for surgeons and apothecaries; the fees, however, being often paid in tobacco, powder, lead, wampum, etc. Not a few combined ministry of the body and the soul, and a number of eminent physicians were also preachers of more or less renown, among whom were John Rogers, John Fisk and others.

Probably the only medical work published in America during the Seventeenth century was, "A Brief Rule to Guide the Common People of New England How to Treat Themselves and Others in the Small Pocks and Measels." This book was printed and sold in 1677 by John Foster of Boston.

During this century, also, a number of midwives made excellent practitioners, among them the wife of Dr. Fuller, one of the Mayflower Pilgrims. Those Colonial days, however, seem to have been free from the ravages of itinerant specialists and charlatans, who so abundantly infested Europe at this time; and it is to the everlasting credit of the American profession that it took no part in the horrible delusions and scandalous transactions connected with the Salem witchcraft.

During the eighteenth century a large proportion of educated medical men came from abroad and settled in various parts of this country. The Colonial and Revolutionary wars furnished ample opportunity for the study of military medicine and surgery. The most lively discussion of the century was probably that excited by the introduction in this country of vaccination against smallpox. The profession is largely indebted to the Rev. Cotton Mather of Boston, for the favor with which the new method was received in this country. In 1721 he called the attention of various American physicians to the method then in vogue in Turkey, of inoculation with virus from the active disease. All credit is due to Dr. Boylston of Brookline, Massachusetts, who settled in Boston, and who after corresponding with members of the British Royal Society, finally decided to put the method to actual trial. In proof of his belief in the use of this virus, he inoculated his own son in 1721, and within the next year had inoculated 247 persons with the virus of natural smallpox, of whom only about two per cent. died, while of nearly six thousand attacked by the disease in the natural way fourteen per cent. died. In spite of this, however, the man and his methods were violently attacked by the public, warmly backed by the clergy. It is said that Benjamin Franklin, then only sixteen years of age, was strenuously opposed to the inoculation method. Boylston was threatened with hanging, and had even to hide himself for a time. He died in 1766. The earliest vaccination in the United States was performed by Dr. Waterhouse (1754-1846), who operated upon four of his own children in 1780.

During the eighteenth century a number of our best educational institutions were founded, among which are Yale College in 1701, Princeton (College of New Jersey) in 1746, University of Pennsylvania in 1749, and Columbia (King's College) in 1754. In most of these were eventually established medical departments, no preliminary education whatever being demanded. About the middle of the century Drs.

*President's address, delivered before the General Meeting and Opening Exercises, Annual Session, Fort Worth, May 4, 1915.

Bard and Middleton in New York and Dr. Cadwallader in Philadelphia began giving lectures in anatomy, while at Newport, Rhode Island, Dr. William Hunter began a course of lectures on human and comparative anatomy. Lectures on anatomy and midwifery were given by Dr. W. M. Shippen, and they led to the formation of the Medical Department of the College of Philadelphia, in 1765, in which college lectures were continued regularly until the Revolutionary War interfered. Shippen and Morgan were for some time the only professors in the Medical Department of the Philadelphia College. In 1768 Kuhn, a pupil of Linnaeus, was made Professor of Materia Medica and Botany, and Benjamin Rush, a year later, was given the chair of Chemistry. The first commencement of this institution occurred in 1768, when the degree of M. B. was given to seventeen graduates.

The present medical department of the University of Pennsylvania is no doubt the first medical school in America. The medical department of King's College (Columbia) was organized in 1767. The medical department of Harvard was organized in 1783. Most prominent in connection with the latter was Dr. John Warren, the first teacher of anatomy and surgery, and the founder of a family of eminent medical men. The Pennsylvania Hospital, founded in 1762, is to be credited with the oldest medical library in the country. It now contains many thousands of medical volumes. The profession of New Jersey organized the first State Medical Society, in 1765. In 1781 Massachusetts founded a State Medical Society. In 1787 the College of Physicians and Surgeons of Philadelphia came into being. Before the close of the century South Carolina, Delaware and New Hampshire also organized State societies. The first insane asylum in America was built in Williamsburg, Virginia, in 1773, although the charter of the Pennsylvania Hospital, dated 1751, provided for the care of lunatics, though not at that time in a separate institution.

Undoubtedly the most conspicuous medical character of the century, in America, was Dr. Benjamin Rush (1745-1813). He was a member of the Continental Congress, and one of the signers of the Declaration of Independence. He recognized but two kinds of remedies—stimulants and depressants, and held it to be the duty of the physician to decide which was the proper remedy to be applied. He called calomel the "Samson" of materia medica, and his opponents declared he was right, since it had undoubtedly slain its thousands. Rush Medical College, now University of Chicago, was named for him. As an accurate observer of diseases he was exact, and his descriptions are today both classical and reliable.

During the earlier days in America the study of practical anatomy was very difficult. At first only the bodies of executed criminals were sparingly furnished. In 1788, in New York, occurred the celebrated "doctors' mob," which attested the violence of public objection to dissection, and which for two days defied the authorities. Secret dissection had been practiced in Harvard College as early as 1771, but the practice was against the law in Massachusetts as late as sixty years later. Physiology, as such, was not taught in any medical school during the eighteenth century, and experimental physiology was practically unknown during that time.

The position of midwifery in the earlier years of the country may be understood by the following from *The New York Weekly Post-Boy,* July, 1745: "Last night died, in the prime of life, to the almost universal regret and sorrow of this city, Mr. John du Puy, M. D., man-midwife," etc. The first practitioner of obstetrics in New England was Dr. Lloyd, a pupil of Hunter and Smelley. The first attempt to regulate the practice of medicine in Colonial times was an act passed by the General Assembly of 1760, providing for at least a form of examination in physic and surgery, registration, etc. The first medical journal to appear in the United States appeared about 1790. It was entitled, *A Journal of the Practice of Medicine and Surgery and Pharmacy in the Military Hospitals of France,* and consisted merely of translations from the French and German. The first real American Medical Journal was the *Medical Repository,* established in 1797 and discontinued in 1824.

The first independent writer upon diseases of the eye was Dr. Frick (1793-1870) of Maryland. Illustrative of how little our present specialties were then separated, it is worth while to remark that Dr. Edward Delafield, who, in 1826, was professor of Obstetrics and Diseases of Women and Children in the College of Physicians and Surgeons, New York, delivered at the same time a special course of lectures upon the diseases of the eye. The first physician in the United States to make these diseases an exclusive specialty was Dr. Williams (1822-1888) of Cincinnati. It would be wrong, in this connection, to omit mention of Dr. Oliver Wendell Holmes, the genial "Autocrat of the Breakfast Table," who used to say that he was seventy years young. He was for a long time Professor of Anatomy at Harvard Medical College, and rendered a great service to the medical profession by first calling attention to the contagiousness of puerperal fever.

I must also mention John Collins Warren (1778-1856), first Professor of Anatomy and Surgery in the Harvard School, under whose

auspices ether was first administered for the purpose of surgical anesthesia, and who was the founder, in 1828, of the *Boston Medical and Surgical Journal.* He wrote an extensive treatise upon tumors, and, it is stated, first successfully tapped the pericardium.

Philip S. Physick (1768-1837), a pupil of Hunter, has been spoken of as the "Father of American Surgery," which branch of medicine he taught in the University of Pennsylvania. He was the first to employ animal ligatures of buckskin. Dr. John Syng Dorsey was a nephew of Physick, and was the first in the United States to tie the external iliac artery.

Ephraim McDowell (1772-1830) lived in Danville, Kentucky. To him is jointly due the honor of having performed the first rational and deliberate ovariotomy, in 1809. The operation was performed without an anesthetic, and, considering the circumstances under which it was carried out, the accomplishment has shed a lustre upon his name which nothing can ever dim. By this performance he became practically the father of modern abdominal surgery, and to him Americans and Europeans alike are delighted to render the honor which is his due.

Dr. Valentine Mott was a surgeon of exceeding boldness and brilliancy, who taught in the College of Physicians and Surgeons in New York until 1840, and in the University Medical School until 1860. He probably did more work in surgery of the vascular system than any other surgeon who has ever lived. He was the first to tie the innominate artery (1818). He was also the first to do a successful extirpation of the clavicle for tumor.

The most prominent figure in American surgery during the past century was Samuel D. Gross of Philadelphia. He was a professor in the Jefferson School, removing to Philadelphia from Kentucky, having been professor at the University of Louisville, at that time known as the Transylvania Medical School.

Nathan R. Smith of Baltimore, was the inventor of the anterior splint.

Henry J. Bigelow of Boston, who performed the first excision of the hip in this country, in 1852, and who invented the method of crushing and removing stones from the bladder at a single operation, should also receive mention as one of the great pioneers of American medicine.

Probably the most prominent figure in American gynecology is J. Marion Sims (1813-1883). He was born in the South, where he invented his well-known speculum in 1852. He was the founder of the great Woman's Hospital in New York, in 1855, an institution from which has proceeded more good gynecological teaching than from any similar institution in the world.

The present century has awakened a new era in medical education. Within twenty-five years the whole method of teaching medicine has been revolutionized in the United States. As has been stated, the old medical teaching was largely didactic; it gave information at long range about things and processes which were not within reach or sight at the moment. The new medical education aims at imparting manual and ocular skill, and cultivating the mental powers of close attention through prolonged investigations at close quarters with the facts, and justly reasoning from the evidence adduced. In all the leading medical institutions of today instruction is arranged in a carefully graded course, which carries the student progressively through medical science in an orderly and logical way, from year to year. Laboratory work in anatomy, medical chemistry, physiology, histology, embryology, pathology, and bacteriology demands a large part of the student's attention. Instruction has become, in many clinical departments, absolutely individual, the instructor dealing with one student at a time, and personally showing him how to see, hear and touch for himself, in all sorts of difficult cases. Much instruction is given to small groups of students, three or four at a time, no more than can actually see and touch for themselves.

In 1910 there were, excluding graduate schools, 135 medical schools in the United States, with 21,394 students. The increase in medical students in 32 years has been 333 per cent. Of these schools 112 were regular, with 19,983 students; 14 homœopathic, with 947 students, and 7 eclectic, with 394 students. At present there are 101 schools, with 16,502 students.

More attention should be paid in the United States to instruction in hygiene and State medicine. In Great Britain no one can be appointed a medical officer unless he has a special diploma in public health. In the United States medical appointments are for the most part political. In this country very little opportunity is offered for general sanitary work on broad lines. This subject is now under discussion, and doubtless all progressive States will soon provide places where medical health officers or other persons engaged in sanitary work can obtain practical and scientific training. The scientific investigations which will be made in the laboratories of such schools will be of great value to the public.

All political divisions, except Alaska, now have examining and licensing boards. In some States stringent laws against non-medical practitioners are enforced; in others quackery receives such legal protection that any person may treat the sick or suffering by mental or spiritual means without the use of any drug or material remedy. This is largely due to the fact that so many statutes lack specific definition as to what constitutes the practice of

medicine, and without such definition conviction can hardly be secured through the courts. There is much misunderstanding in this country regarding the duty of the State in relation to the health of the people. It does not consist in discriminating between schools or systems of medicine, but in requiring without prejudice or partiality, that all who seek a license to practice for gain on the lives of fellow beings have a minimum preliminary and professional training.

As commonly understood, regular physicians have no distinct theory or practice; Homœopaths treat diseases with drugs that excite in healthy persons similar symptoms to the morbid conditions treated; Eclectics make use of what they regard as specific remedies, chiefly botanical; Physiomedicalists use only botanical remedies, discarding those which are poisonous. In practice these distinctions are not always observed. A number of States now have mixed examining boards; that is, the boards are composed of representatives of the several schools of medicine. Prominent among these is our own State.

The American Medical Association was organized in New York city in 1847. A brief and extremely interesting history of its organization was given by Dr. George H. Simmons, editor of *The Journal of the American Medical Association,* before a conference of State Secretaries held in Chicago in November, 1912.

The American Medical Association has always been a delegated body, and only delegates have had a right to take part in its proceedings. In 1883 *The Journal* was started, and the following year, for the purpose of increasing the circulation of *The Journal,* there was created another class, known as members by application. A member of any so-called affiliated society could become a "member by application" simply by making application for membership and paying the annual dues. The difference between "members by application" and "permanent members" was that the latter had been delegates, whereas the former became members simply by making application, and neither "permanent members" nor "members by application" had vote or voice in the business meetings.

At the present time we have two distinct classes, "Members" and Fellows." All members in good standing in their respective County and State organizations are known as "Members of the American Medical Association." and those who are willing to contribute $5.00 a year to the support of the work of the Association and for *The Journal* are designated "Fellows of the American Medical Association." There are approximately seventy-six thousand "Members" and between forty-two and forty-three thousand "Fellows."

In regard to the organization of our own State Association, I quote the presidential address of Dr. Frank Paschal, delivered before the State Association at Austin in 1904.

"On the 17th of January, 1853, about fifteen physicians met here and organized the State Medical Association of Texas. A charter was granted by the Legislature to the Association legalizing its existence and constitution. The object of the Association was 'the organization of the qualified medical practitioners of the State for the purpose of insuring unity of design and concerted action in devising and carrying into execution such measures as would conduce to the general welfare and improvement of the profession, and the exclusion from its ranks of unworthy and unqualified persons.'

"The first annual meeting was held in San Antonio, November 16, 1853. Dr. George Cupples was President of the Association, and delivered the first, and one of the most scholarly addresses in its history. His opening remarks are as appropriate today as they were fifty-one years ago, although conditions have greatly changed, and I will, therefore, quote them: 'Of all the elements of progress to which the present age owes its unparalleled advance in every department of science and of art, none is more marked, more characteristic of the times in which we live, than the spirit of the association and of concert of design in the attainments of results beyond the reach of individual enterprise or of isolated exertion.'

"Dr. Cupples said that the State Medical Association of Texas was established, not from any sudden impulse, or for the purpose, as has been facetiously conjectured, of raising the fees, or of securing a monopoly, but in prosecution of a plan long contemplated by many physicans in this State, of whom that distinguished ornament of our profession, Dr. Ashbel Smith, was one.

"On the 15th of June, 1869, the Association was reorganized in Houston, and some of those who assisted in organizing the first association joined again. Dr. J. H. Heard was the first President. From 1869 to 1878 there were very poor facilities for transportation, but stage coaches were well patronized by members attending the annual meetings, which have been held regularly since 1869."

Of course, those of us who live in Texas are greatly interested in what we have done since the beginning of medical practice in this State. In 1873 resolutions were adopted outlining steps for the prevention and eradication of yellow fever. At that time our knowledge of this disease was very meager, especially as to its cause. It is significant that in less than thirty years this plague has practically been eliminated from all civilized countries, through

the discovery of the cause of this dreaded disease.

In 1874 a committee was appointed to study the geographical distribution of disease, and another committee at the same time was directed to seek the enactment of a law creating a State Board of Health, with subordinate County Boards of Health. A petition to appoint a sanitary commissioner in each county for the purpose, among other things, of collecting and registering vital statistics, was placed before the Governor. That was as far as it went—simply a petition. It was many years before the State actually began to collect vital statistics.

In 1875, in the absence of a Board of Health, the Association made a report to the Governor on the sanitary conditions of the State, with such recommendations as seemed advisable. It was in this year that an epidemic of smallpox prevailed. It was wide-spread and had been prevalent for some time. A demand was made for an effective system of vaccination. At that time there was the same misguided opposition to vaccination as presents itself now whenever the subject is mentioned, and this served to defeat the measure. There was also a protest against relying upon quarantine measures alone for the prevention of yellow fever; it was urged that proper sanitary measures be resorted to as well. Just about this time it seemed to dawn upon the profession that their advice and counsel was not so acceptable to the Legislature as it usually was to their patients, and that there must be a popular clamor for a law before it would stand any chance of being enacted. This was about the year 1875, and a campaign of public education was at that time recommended. I may add here that the campaign was launched very soon, and has been prosecuted up to the present time. The first State Board of Health in the United States was established through the agency of a woman, Mrs. Thomas F. Plunkett of Massachusetts, she being the originator of the movement.

Dr. A. R. Kilpatrick, retiring President of the Association, in 1879, said: "Sanitary instruction is of more importance than sanitary legislation." He at the same time advocated the education of women on sanitary matters, claiming that they were the most fruitful source of success along this line. I wish to add here that I voice these sentiments to the fullest extent. Women are the most potent factors we have today for success in all such movements. The women's clubs of Texas are today doing more along that line than all the doctors combined, and it behooves us to have them always upon our side, for they are nearly always right. President Dr. J. H. Pope made another significant statement, so familiar as a fact to those of us who have inherited the accumulated antipathy of the opponents of medical progress: "It has been too much the custom to leave all the thinking on this subject to physicians. This might possibly do if they could enforce their ideas, but they are generally accused of doing unnecessary things and encroaching upon the liberty of the individual when they propose reforms for the benefit of the public health. This is because people being ignorant of the laws of disease do not see the value of the proposed reforms."

I wish now to pay my respects to the press of this State for the aid that they are giving, and are always willing to give, to the betterment of the public health. The greatest power for good in the world is the press, and it behooves us as physicians to always realize that fact.

There has for many years been more or less agitation for a Board of Health, and for laws on the subject of sanitation, and the earnestness of the early promoters of the movement may be judged by the fact that in 1889 the Association decided to send out five thousand circulars, at a cost not to exceed one dollar each, telling why certain medical legislation was needed, in order to educate the people to an intelligent understanding. It was in 1890 that a committee was appointed to organize "sanitary societies for the education of the laity on public health matters."

It was in 1853 that our first President, Dr. George Cupples of San Antonio, urged "the education of public opinion by constant discussion by the medical profession, in and out of season." President J. D. Osborn, in 1893, voiced a complaint, and at the same time reaffirmed the position of the medical profession in the following words: "While we are not permitted by these same powers that be to control or lead in sanitary affairs or proclaim quarantine, it does not lessen our duty as an organization, nor our duty to our fellow man to be ever on the outlook, and we must perform that duty faithfully and promptly; we must educate the people in the principles of health and the penalties for their violation. For this we receive no praise or fame." Dr. Osborn, I am happy to state, is still with us in the flesh, and he can observe for himself how faithfully we have followed his advice.

It was in 1894 that the Association got down to real practical politics. At that time plans for a Board of Health were outlined, which plans provided for a vital statistics department and "an expert in microscopy and chemistry, to ascertain the source of diseases and epidemics, when such investigations are necessary." It was in 1895 that the retiring President, Dr. P. C. Coleman of Colorado City, said that the Association would be unsuccessful in securing

public health laws so long as it continued to present appeals based alone on patriotic and utilitarian considerations. He said: "The profession must find means of supplying political screws—a method greatly respected by legislators." Minor schools of medicine were soon asked to join in the movement, and in 1901 the demand became a party platform principle. The bill was constantly kept before the Legislatures, until in 1909 it passed in fairly satisfactory form. There was not very much authority granted, and the appropriation made for its support was inadequate. We could see, though, that we were growing in the estimation of the people, and the thirty-first Legislature was pronounced, through a resolution passed by the State Association, to be more alive to the requirements of the public health than any previous Legislature, which was, no doubt, due to a special campaign of publicity launched a year or so before, and to a controversy with the County Judges' Association, which had condemned the measure because of a misapprehension concerning the method of appointing County Boards of Health. In 1911 this law was still further perfected, when the sanitary code was enacted into law. I wish to add, that the law requires still further amendments to make it what it should be; that is, a measure to foster the public health, not only by preventing the spread of contagion, but by demonstrating to the people the truths of hygiene and sanitation.

From time immemorial our State hospitals for the insane have been a matter of interest to the medical profession and to the public at large, not so much because of patriotic consideration as for humanity's sake. I believe it was in 1873 that a resolution demanding sufficient appropriations for the lunatic asylums to enable them to take the accumulated insane from the county jails through the State, was presented. Our treatment of the insane has always been a blot on our civilization, and we ought at least to prevent such barbarous methods as confinement of the insane in county jails. These people are not criminals, but are sick, and require just the same attention as any other sick persons. It was in 1911 that our committee on the care and treatment of the insane was established, its main function being to bring about an amendment of our laws relating to the commitment of the insane, and to relieve humanity of the grave charge of abusing these unfortunate sick people by incarcerating them in jails. A broad and comprehensive measure, thoroughly revising our present proceedings in the trial and "conviction" of the insane was prepared and introduced in the Legislature following. It died on the calendar, largely for lack of time to consider it. Largely through the instrumentality of President Dr. J. S. Turner of Dallas, in 1913, a law was passed providing for trial of the insane by County Boards of Physicians, instead of the usual lay jury, which law, if upheld by the courts, will no doubt prove valuable from a humanitarian standpoint. This law is now being attacked in the courts, and it is questionable whether it will stand, the ground for attack being that the law denies the constitutional guarantee of trial by jury. How could we find a better jury to pass upon the insane than a jury of physicians, particularly in a matter so highly technical?

In 1873 a resolution was passed by the State Association containing the statement that "the profession of Texas see with unmixed regret the names of prominent clergymen recommending and bolstering up empiricism and empires." It was the next year that a committee was appointed to draft a law regulating the sale of drugs, patent medicines, etc. Of course, this necessarily led to the consideration of the sale of poisons and to the adulteration of drugs, and there have been successive reports and resolutions under consideration since that time. In 1881 the Association petitioned the Texas members of Congress to assist in the passage of a national pure food and drug law, and it may be interesting to know that a year or so later a resolution was adopted condemning the medical profession for indorsing proprietary remedies. I am sorry to state that even now some of our profession indorse proprietary medicines. I am also ashamed to admit that we find in our church papers, organs of the different denominations, indorsements of the most vicious nostrums, and for the sole purpose of commercial gain. A few of the most widely read of our magazines and periodicals have taken a firm stand against such advertisements, and I hope the day is not far distant when all reputable periodicals will follow suit.

The final passage and enactment of the Harrison Narcotic Law by the last Congress, is a happy culmination of the work of the medical profession. This law went into effect on March 1st of this year.

The State Medical Association has always stood for the highest standard of medical education, which undoubtedly is a distinct and necessary contribution to the public health. It has been my observation that most of the charlatans and advertising fakers come from the cheap medical colleges.

It was in 1878 that the State Association indorsed a bill then pending in Congress "to prevent the introduction of infectious diseases into the United States." The State Medical Association has gone on record as commending what is popularly known as the Owen Bill.

This bill has received our indorsement almost yearly since it was introduced, and our representatives in Congress have been repeatedly urged to assist in its passage. We are firmly convinced that this bill can in no wise interfere with the rights of the State or any individual citizen thereof. We shall continue to work for the establishment of a National Department of Health, with a physician at its head and with the dignity of a cabinet position.

The State Association went on record many years ago as trying to induce the State and county to take care of the indigent tuberculous. In 1903 the Association began the preparation of a bill providing for the establishment of a State institution of this character, which was introduced into the thirtieth Legislature. It passed the House, but was held up in the Senate, because of the then considered enormous appropriation of $100,000 it carried. The same measure was passed by the thirty-first Legislature in 1909, but was vetoed by Governor Campbell on the ground that the bill carried an insufficient appropriation to care for the indigent consumptives already in the State. Again the measure was introduced in 1911, but by this time the proposition had become so popular that it was taken out of the hands of the medical profession entirely, and so amended and reformed that in our opinion it lost much of its value. The bill as originally devised provided for a control which was inexpensive. The law as passed provided for a paid commission on a very inadequate salary, which commission was supposed to conduct an educational propaganda in addition to its other duties. It so happens that men competent to carry on such a campaign could not possibly be secured for the salary offered, and that feature of the law was destined to failure. I am pleased to note, however, that the law has since been so amended as to correct this fault in a measure, and it is to be hoped that the Board of Control will soon see its way clear to unite with the medical profession and other public health workers in sending out over the State lecturers technically and practically informed on this subject, for educational purposes.

Too much credit cannot be given to Mr. R. J. Newton, Secretary of the Texas State Public Health Association, who has been untiring in working for all public health matters. Through his instrumentality much good has already been accomplished, and if he is given proper support, which I trust the medical profession of this State will give him, greater good will hereafter follow his efforts.

During the past year, your President, the Secretary, Drs. C. E. Cantrell and William Brumby, joined Mr. Newton in a plea before the Senate and House Committees on Public Health in the interest of the Shaffroth-Calloway Bill, which provided for the conversion of abandoned military posts in the Southwest into Federal sanitariums for the treatment of indigent stranger consumptives. We believe this project would prove not only a boon to a class of unfortunates much larger than we are wont to consider, but a simple act of justice to the people of the Southwest, who have been much imposed upon in this respect heretofore. We met with much encouragement, but the bill failed of passage.

In conclusion I may say of our Association that, aside from our efforts to educate our own members, we maintain standing committees on public policy and legislation; on the enforcement of public health laws; on the care and treatment of the insane; on the revision of school text-books, and on the care and treatment of indigent consumptives. We are ready at all times to receive the advice of and to advise with all persons or organizations interested in the public health, on any movement that promises in the least to prove beneficial. In fact, we very much prefer that all such work, as I have stated before, should be conducted by lay organizations, especially through the efforts of the women's clubs and the press. We would under such circumstances, have more time to devote to the study of the science of medicine.

LIFE AND DEATH: THE TWIN MYSTERIES.*

BY

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In the presence of the mystery we call life, and the greater mystery we call death, mankind has ever been as we tonight, glad that life is, distressed that death must come, but in the philosophy of each equally unlearned.

The flowers of springtime bloom in fragrant beauty by the roadside, in garden, field and meadow, and we call that life. When wintry winds have chilled them, they fade and vanish; we call that death. The infant cooing at the fond caress reflects with eyes of wonderment the mother love of her who bore it, and a new life is; the race from the cradle is begun, the bounding boy rushes to the responsibilities of real life, where through the years he contends with conditions for all that is laudable and right; the brain grows weary, strength fails,

*Memorial address delivered before the General Session and Memorial Exercises, State Medical Association of Texas, Fort Worth, May 4, 1915.

"the golden bowl is broken and the pitcher at the fountain, and dust returns to dust as it was, and the spirit to God who gave it."

In a beautiful allegory styled "The Vision of Mirza," Addison places Mirza upon a high elevation overlooking an immense valley, through which is surging an endless tide, "The Vale of Misery." A stream rises out of a thick mist at one end to lose itself in a thick mist at the other, a part of eternity we call time. Spanning this stream, as representing human life, he observed a bridge, the inspection of which discovers that it is composed of three score and ten entire arches, and several broken ones, which taken together make the number about one hundred. Attempting to cross by this bridge, he observes a multitude, and very many of the throng are dropping through into the never-ceasing tide beneath, for there are innumerable trap doors lying concealed in the bridge, which no sooner than they are tread upon, spring open and the travelers immediately drop through and disappear. He also observes that the trap doors are more thickly grouped at the entrance, and many, very many, fall through as it is leaving the cloud of mist. They then are fewer until the latter group of arches are reached. Beyond these and over the broken arches, a few struggle on in a kind of hobbling march, finally falling through one after another, being "quite tired and worn after so long a walk."

The teaching of this allegory is the doctrine of "Fatalism," a theory easy of acceptance, but which though comforting in an hour of disappointing defeat, must be rejected, because unscientific, unsound and therefore prejudicial to progress.

The avocation which we as physicans have entered, to the responsibilities of which our lives are dedicated, has for its object that "Growth shall be more perfect, life more vigorous, decay less rapid, and death more remote." In the study and the practice of medicine millions in money are expended, and thousands of men, the equal of any, are engaging their best endeavors toward these ends, with what we believe to be the nearest approach to successful issues to be attained against such odds. But notwithstanding this commending fact, we are constantly confronted by cases of individual character, due sometimes to unfortunate heredity, sometimes to faulty environment and at others to ignorance or indifference, one or both, which, added to the unavoidable agencies of illness and injury, too often prevent us in the performance of our delicate, oftimes difficult, and always seriously sacred duties.

It is particularly heartrending when what we have best learned and applied in the most skillful way known to us, utterly fails within our own families, or in service for our most loved friends.

Pathetic in the extreme as scenes of impending death always are, there are none which to me have been so keenly significant as that which attends the going out of a medical practitioner while yet in the forceful period of humanitarian usefulness; one whose life work has been an effort to help the men, the women and the children of his community along a pathway wherein he himself is falling.

"Who saved others, himself he could not save!" This utterance, although intended as a taunt of ridicule toward the lowly man of Galilee, was expressive of a great and living truth, and it now may remind us that He whose divine attribute commanded the restless waves of the mighty deep to cease their troubling, and by His death redeemed a fallen race, yet yielded to the law of material dissolution.

Who, then, shall question us or remark upon our limitations; and why shall we wonder that the human way is ultimately our way?

"Leaves have their time to fall,
And flowers to wither at the north wind's breath,
And stars to set, but all,
Thou hast all seasons for thine own, O Death!"

And we are here tonight, my friends, not as physicians and surgeons, those capacities having been laid aside for this hour, this memorial hour, to read in formal hearing the roster of those who, during the brief year since our last session, have passed beyond the Great Divide.

They were loved and their memories are revered. We would do honor to their memories and as if by an open grave let fall the simple flower.

It would be ill timed to attempt to discourse in this presence, and it would be impossible to justly do so here or elsewhere, upon their merits as men, their worthiness as citizens; nor would we undertake to estimate the loss which the profession has sustained by their separation.

Each was educated, cultured and capable, earnest, and withal in the exercise of charity, good will and good conscience. They led lives of unselfish devotion, independent of our written code, the strictest provisions of which exact nothing from those whose contact with and consideration for others are actuated by the principles of the Golden Rule.

The far-reaching and most important effect of an exemplary life is the collective impression it creates, the essential tendency of which is to elevate the contemporary mind and to improve the morals of the immediate public as it passes on a resistless influence upon posterity.

I would, then, not only have you contemplate the higher attributes of each for emulation, but I would have you also entwine the better characteristic of them all, composing thus a picture which may portray besides the obvious virtues

which the casual biographer can record, helpful sympathies whether expressed in a composite personality of the tender touch, the kindly word, and the reassuring smile.

We know the lessons which lives like theirs are teaching day by day. It is the story of self-sacrifice and consecrated service, and happily we are told that "He who has been servant of them all shall be the greatest in the kingdom."

Some of our lamented friends heard the summons while yet in the halo of the rising sun, when hope's fond dreams of an extended future became a broken prophecy. To others it came while standing upon the topmost pinnacle of professional prominence, but whether then or after a well-spent life lay out in panorama, 'twas all the same.

The flower of youth may fade while yet unblown to its full prospective. The Beckoning Hand may call in the triumphant hour of human achievement, or when shadows have lengthened to keep pace with the three score years and ten. It is the same in this, that the summons is obeyed, for, muffled as it may be, it subdues the din of traffic and drowns our erstwhile melodies. The shadow of an invisible wing removes the health glow from the cheek; the heart, faithful through all stress before, now forgets its movements; a tremulous sigh and then comes death!

And of death, what shall we say? Through the ages life has been variously estimated and death has been variously regarded. This is the announcement of Socrates:

"There are just two alternatives regarding death; either the dead man has lost all power of perception and wholly ceased to be, or else, as tradition has it, the soul at death changes its habitation, moving from its home here to its home yonder. And if there is no perception at all and death is like a sound sleep, unbroken even by a dream, then it is a wonderful gain.

"If, on the other hand, death is a journey to another world, and if the traditional belief is true that all the dead are there, what greater blessing could there be than this, Oh, my judges?"

But sublime as was the wisdom of Socrates, that of a world philosopher, his was only the twilight of truth, to be totally eclipsed and superseded by the Gospel of Jesus Christ, in the faith of which the Christian may exclaim: "O Grave, where is thy victory; O Death, where is thy sting?"

Death cannot be the end of life. The past, the present, the future, behold the circle of humanity. The past is the root, the present its fruit, the future a rose of expectancy. Our paths point forward, and how reluctant soever, our feet move forward too; but the veil of the future eludes our grasp, and no wafture of our wings can ruffle its folds, nor give the slightest glimpse of the dim beyond. Vainly do we lift our eyes to heaven and say, "Oh Father, what does the future hold for us?"

"The solemn murmur of the soul
Tells of a world to be,
As travelers hear the billows roll
Before they reach the sea."

Difficult as it is for the finite mind to grasp the facts of the infinite, it is more impossible to believe that, controlled by such limitation as human strength has set, the glorious provisions guaranteed by the God of Nature would seem worth while.

Death cannot be the final end of life. Look into space and the million brilliant orbs stand out before us, and still beyond them in blazing glory the countless stars! Could it be that this indescribable illumination was created only as a canopy for one isolated world?

Reversing our inquiry, and by the aid of science, we search the dewdrop for what it holds beyond the unaided ken of the human eye. Miniature colonies and even worlds are discovered in perfect proportion and adjustment!

We know the cycle of our existence here, in which cycle all animate things must move; we know that change is the order and death the consequence; but this we also know, as surely as that we live and die, that "we shall live again." Death cannot be the end of life! It must be that in some clime the flowers of springtime do not fade; it must be that somewhere the sweet song birds of today will sing on through an endless tomorrow; it must be that our longing for life eternal is not a meaningless mockery, but that there is a somewhere wherein the tired feet may find a heavenly rest, and where happiness is immortal.

There is perhaps, my friends, no superior sentiment and certainly none more suitable for us to join, at this the closing moment of our loving tribute to our noble dead, than that of the poet as he looked after the receding waterfowl, which with untutored wisdom, crossed the azure blue in answer to the call of a far-away summerland:

"He who from zone to zone,
Guides through the boundless air thy certain flight,
In the long way that I must tread alone,
Will lead my steps aright."

Sherman's Non-Virulent Tubercle Vaccine.—This product of G. H. Sherman, Detroit, was refused recognition by the Council on Pharmacy and Chemistry because the far-reaching claims made for it were not substantiated by suitable evidence. (*Jour. A. M. A.*, November 21, 1914).

White Sulphur Salts.—This is an effervescing salt put on the market by the White Sulphur Springs, Inc. It was refused recognition by the Council on Pharmacy and Chemistry because it did not represent the water of White Sulphur Springs, Va., as claimed. (*Jour. A. M. A.*, November 21, 1914).

TRANSACTIONS

FORTY-NINTH ANNUAL MEETING OF THE STATE MEDICAL ASSOCIATION OF TEXAS.

FORT WORTH, MAY 4, 5 AND 6, 1915.

FIRST DAY---MAY 4

GENERAL MEETING AND OPENING EXERCISES

The Forty-ninth Annual Session of the State Medical Association of Texas was called to order at 10 a. m., in the auditorium of the First Baptist Church, by President Dr. Frank D. Boyd, who delivered the gavel to Dr. S. A. Woodward of Fort Worth, chairman of the local Arrangement Committee, who presided during introductory exercises and until the conclusion of the President's Address.

INVOCATION BY REV. F. D. KERSHNER.

Almighty God, our Father in Heaven, from Thee all things come and in Thee all things exist; all the power known to man or wielded by his arm, matched with thine, is but as dust in the balance; but we thank Thee, our Lord, that amid all of the mysteries and the miracles of Nature, Thou hast revealed thyself unto us, not only as a supreme intelligence but likewise as a loving Father; that as a father pitieth his children Thou dost pity those who come unto Thee. We invoke Thy blessing and Thy benediction today. Grant that as we look forward out into the infinite reachings of knowledge we may carry with us the approval of the one supreme intelligence of all. Dear Lord, take our science and make it holy; take our art and make it pure; take our literature and make it clean. As we grow in years may we grow in the habit of holiness; in the days of prosperity and abundance grant that as individuals and as a nation we may not forget Thee; and then we know that in the days of darkness and trial Thou wilt not forget us. Bless us in our deliberations today; lead us ever by Thy hand. When in Thine own good time Thou dost call us to go, be it in the brightness of the morning, in the full glory of the noontime, or be it beneath the fading richness of the setting sun, may Thy hand sustain us and lead us through the valley of the shadow into Thine own everlasting morning beyond the grave, Thine to be the praise and the glory, through Christ, our Lord, Amen.

The Honorable Claude McCaleb of Fort Worth, welcomed the Association in behalf of the Mayor, who was unavoidably detained at an important session of the City Commission.

ADDRESS BY MR. CLAUDE MCCALEB.

The mayor was detained at an important meeting this morning, which accounts for his absence. He desires me to state to you that just as soon as he takes care of that urgent business he will devote the balance of the three days to seeing that you enjoy yourselves while in Fort Worth.

For ten years I was the official stenographer of the State Medical Association of Texas. I feel that if anybody knows the doctors, any layman or semi-layman, I do, because no man can report these sessions without absorbing some of the theories of medicine and politics and other things that go with these conventions.

For the mayor, I want to welcome you to the City of Fort Worth. For my own personal amusement, I want to have the privilege of diagnosing you doctors, even as you have diagnosed me these many years. I want to say that I do not believe in mixing too much business with your general meetings; the business is over in the Scientific Sections and House of Delegates. I want to deny the report that I sanction the remark heard at the Waco session, in which a doctor from out in the rural district, when I asked him, "Doctor, how do you find the practice in the country?" said, "Now days it isn't much trouble to practice in the country; we just get a man pretty sick and then we put a shipping tag on him and ship him to the surgeon." I don't approve of that. In fact, I think the young doctors are not ever satisfied until they have written their names with the scalpel. I think the doctors have a profession, the only one of its kind, that works against itself, in that they devote their spare time to cutting their own pocketbooks and their own incomes. I am reminded of a drummer who traveled about for several months and finally sold the output of the factory and wired the factory, "Have sold entire output of factory for six years." They wired him back, "Congratulations; you are fired; we don't need you any longer."

You doctors are pursuing different little bugs and microbes; you are informing the layman on these different things; you have got me afraid to take a drink of water, afraid to eat meat, afraid to eat anything that is not in a capsule; afraid to do anything. I have never been able to fathom the mysteries of the medical profession; I have never understood why it is necessary, when a layman takes dangerously ill and sends for one of you great physicians—we don't know what is the matter with us, we are frightened—for you to draw a long face and rub your hands before you look the patient in the eye; I have never been able to fathom that, but you will everyone do it—you will run our temperature up two or three degrees while you are rubbing your hands, to let us know you are not afraid of death.

I suppose I have a personal, intimate acquaintance with more doctors than anybody in Fort Worth. I change doctors every time I get sick. When I am feeling well and my temperature is normal, I don't put much faith in doctors, but when I am sick I want the whole convention called in, and even then I am afraid that somebody might not get there that could do me some good. It is that way with all of us. We laymen are superstitious; you doctors have never done anything to me to allay that superstition. You come in, and I say, "Doctor, how long am I going to be sick?" You answer you do not know; I fall into your hands reluctantly, and then I go blindly.

I have taken enough medicine to cure everybody in this room. A long time ago, before I went to reporting the State Medical Association meetings, I used to take patent medicine. I believe I got more pleasure out of reading the testimonials in patent medicine advertisements than I ever did in taking real medicine. There is nothing on earth that makes a man feel so good as to find a fellow that is suffering just like he is.

It has been said by those better versed in medicine than I am, that ninety-five per cent of the people who go to doctors would get well anyhow. I don't want to dispute that statement; but I have some statistics. I am in favor of surgery, even as you are in favor of surgery—applied to somebody else. I can remember when I lived fifty miles from a railroad, and we used to ride that distance for a doctor; we would get him there in time for him to tell us what the man died of. He was a surgeon. I remember the fiurst surgical operation I ever saw; that old doctor performed it. He was a surgeon, not like you latter day specialists, not a man that washed his hands in red water and white and blue water before he performed the operation; he performed the operation and washed his hands afterwards. That man was a real surgeon. Of course, he was a little shy of technique, but he was there on surgery. Very few ever escaped his knife.

Another thing I am reminded of when I think of my friends, the doctors. Consultation is a new thing; a man always died before we could get the second doctor, where I was raised; we never had any dispute over what the man died of; the verdict was always unanimous; the only post mortems we ever held were following political elections.

A doctor has the greatest chance in the world to play upon the sympathies of the people. You must remember when we send for you we send for you because we think you are the only one that can do us any good; and I am reminded of a little story in this connection, a story of a time when there was in progress a great meeting. The noble pastor was there; the local fire department dashed by and the congregation began to run and look, and the pastor said, "Be seated, the Lord will take care of his own; be seated." About that time a couple of little children dashed into the church and said, "It is the parsonage on fire." The pastor dashed out and left the congregation. One tall, lean, lank human being, who was always at church a little before time and stayed a little after it was over, said, "This is one time the Lord needs a little help." I feel whenever I get sick he is going to take care of me some how; I have a hunch he is going to do it through you doctors, and I want you to come and be with me. Why, a man don't even like to die without a doctor; certainly no man was ever born without a doctor.

Now, gentlemen and members of the Association, to get down to a little more seriousness I want to welcome you in behalf of the City of Fort Worth. I want you to make yourselves at home. If the police don't do to suit you we want you to arrest them and send them in. The mayor has instructed me to say that any citizen who is derelict in his duty in causing you to have a good time is to be arrested and placed in jail and denied the right of habeas corpus until this convention shall have adjourned and you shall have gone home. He has also advised me that he has issued a proclamation amending the laws concerning misdemeanors so that one section reads that no man shall be considered intoxicated during these three days as long as he can produce a membership badge in the Texas State Medical Association.

We are proud to have the youngest chief of police in Texas, and I will now present him to you, that he may give you instructions how to handle our officers. I thank you.

Police Chief Cullen Bailey of Fort Worth, added the following welcome:

ADDRESS BY MR. CULLEN BAILEY.

I am here today in obedience to a great public emergency. In such cases, where there is apt to be a riot and where it is impossible for the ordinary and regular policemen to take care of the situation, the law gives the mayor the authority to appoint innocent citizens as officers. The mayor has instructed me, through the police commissioner, to appoint certain members of your body as special officers during your stay in this city. The reason for this is two-fold: It is for your own protection and for the purpose of paying more particular attention to some of our local practitioners. You may not know these as well as our regular police do—it has been said that no doctor could come to Fort Worth with as much as two suits of clothes and get away with anything but his hat. I have here a list of those of your number who will be appointed on this force, together with their commissions and badges:

Dr. W. F. Starley, Galveston, Chief; Dr. E. F. Cooke, Houston, Assistant Chief; Dr. W. C. Rucker, Washington, D. C., Captain; Dr. A. L. Lincecum, Austin, Captain; Dr. J. J. Terrill, Temple, Captain; Dr. M. L. Graves, Galveston, Lieutenant; Dr. W. A. King, San Antonio, Sergeant; Dr. F. P. Miller, El Paso, Sergeant; Dr. W. B. Russ, San Antonio, Patrolman.

Address of welcome on behalf of the Fort Worth Board of Trade was delivered by Hon. W. B. Paddock of Fort Worth, as follows:

ADDRESS BY HON. W. B. PADDOCK.

I trust that every member here has a stethoscope with him; there will be no other way of measuring the appreciation of the people of Fort Worth for such gatherings as this; we would make declarations with our lips, we would give you the glad hand, the hearty smile, the cordial handshake, but until you hear the quickened beat of the heart you may not know just what we feel. The Chamber of Commerce is the representative in all communities of the commercial interests; nevertheless, it knows, as it must know, that there can be no commercial progress except the health of the community be safeguarded and cared for. Therefore, the commercial interests of this city feel that they are to be benefitted by a gathering of the best medical practitioners of the State. Fort Worth is a healthy community—so healthy, in fact, that our doctors have to go away every year for post-graduate work, to find new diseases to practice on. This town is almost free of disease, and our doctors prosper because of the patients that are sent to Fort Worth. It is a center for practice, not a center for disease. And the Chamber of Commerce, believing that men should be equipped to go out and keep other people well, are gratified that your gathering is in this city, and the commercial elements of the city, as distinguished from its professional element, are proud to have you here and do extend to you a most cordial greeting, wishing that they knew how, in their business-like way, to make you feel more welcome than do your brothers in the medical profession; and in the name of the Chamber of Commerce I echo the words spoken for the mayor, that you are most cordially welcome.

Then followed an address of welcome on behalf of the Tarrant County Medical Society, by Dr. J. A. Gracey, President of the society, as follows:

ADDRESS BY DR. J. A. GRACEY.

It is a great pleasure for me on this occasion to welcome you on behalf of the Tarrant County Medical Society. We laid our plans to go down to Houston last year and capture you, and, now that we have you, what we are going to do with you will be a plenty. You see the preparations that are being made, especially the new police force. I want to welcome you in the words of an old friend of mine, a boyhood friend; as boys, when we would gather around his plenteous table, he would reverently bow his head and ask the blessing, and then he would look on us and say, "Now, put out hands." That meant that we were welcome to everything on the table, to help ourselves; and so now, that the blessing has been said, I just want to say to you, "Now, put out hands."

The President responded to the various addresses of welcome and read his Annual Address, which is published in the Original Article section of this number of the JOURNAL.

THE PRESIDENT: Last November we were instructed by the State Association to go to Richmond for the purpose of inviting the Southern Medical Association to come to Texas. When we got there we found we had a fight on hand, for there were many other States that wanted the meeting. We could not hope to get the Southern Medical Association to come to Texas unless we made some big promises. We can afford to make big promises—we always carry them out. We found out there were only 250 members of the Southern Medical Association in Texas, and we promised them 750 more if they would meet next in our State. No other State could touch that promise, and we landed the prize. Now it is up to us to make good. I want to introduce to you Dr. Oscar Dowling of Shreveport, President of the Southern Medical Association:

ADDRESS BY DR. OSCAR DOWLING.

We hope to see a large number of you at the meeting in Dallas, in November. I am sure every doctor in Texas will become a member of the Southern Medical Association, and we will be very glad to see them there. The fight made by Dr. Cary of Dallas and Dr. Boyd of Fort Worth, for the meeting was a good fight, and I can well appreciate the strength of their promises when I see this large organization that Texas has built up.

THE PRESIDENT: I desire to introduce Dr. W. W. Grant of Denver, Trustee of the American Medical Association:

ADDRESS BY DR. W. W. GRANT.

It is a surprise to be called on at this stage of the proceedings, but as I have been honored by my own association with the position of President for this year, and as we meet in Denver, October 7, 8 and 9, it gives me much pleasure to hope that Texas will send one of her best and most distinguished representatives, or all, if possible, to be with us on that occasion. October is a pleasant time of the year to be in Denver. The fishing is good at that time, and some of the members of your association are in the habit of going to Colorado to try our trout fishing, alleging, as an excuse, that they have hay fever in Texas. I hope you will come to us in October, or at any time, and we will endeavor to give you as cordial and pleasant a greeting as you have given your guests upon this occasion.

THE PRESIDENT: You all know Frank Jones of Memphis, Tennessee. There is only one Frank Jones.

ADDRESS BY DR. FRANK A. JONES.

I recognize that the hour is growing late, and I appreciate that you are perhaps in the attitude of the negro who was called upon to pile lumber with others who were seasoned by years of practice. He piled lumber with these seasoned negroes for two weeks and was pretty well frazzled out at the end. They were all paid up and upon inquiry expressed a willingness to come back the next Monday morning, except this negro, who, counting his money, said, "No, sah, I ain't gwine to come back Monday." "What's the matter, haven't you been treated right?" asked the boss. "Yassah, yassah, I ain't sputing that—mighty nice gentleman, give me mighty good grub; but, boss, I tells you right now, I just nachually got my nuff."

With reference to the Southern Medical Association, I want to accentuate everything my friend Dr. Boyd has said. I want to say that possibly I was instrumental with him and Dr. Cary, and others, in helping you to land us in Texas. The Southern Medical Association is not sectional in any sense of the word. It is an association of the South and by the South, for conditions that confront us in the South, by means of which a great deal can be done along lines pertaining to diseases peculiar to our country. We will appreciate very much the attendance of your members at our meeting in Dallas.

THE PRESIDENT: Last, but not least, we have among us Dr. A. H. Andrews of Chicago, loved by the eye, ear, nose and throat men of Texas:

ADDRESS OF DR. ALBERT H. ANDREWS.

It is a great pleasure and an honor to be with you, and I am thinking today not of the one who is here but of the one who stayed at home, possibly not from necessity but from lack of interest; he reminds me of the old fellow in the prayer meeting. He was testifying, and said that thirty years before he had let down his bucket into the well of salvation, drew it up full, and it had supplied his every need that time since. The man

who followed said that if the good brother had not replenished his bucket in thirty years, he would guarantee it had wiggletails in it.

There being no further business to come before the Association at this time, the General Meeting adjourned.

MINUTES OF THE HOUSE OF DELEGATES.

The House of Delegates was called to order at 2 p. m., by President Dr. Boyd, in the basement of the Chamber of Commerce building, with 68 members present.

Members of the House of Delegates.

(Including attendance during all meetings of the Forty-ninth Annual Session.)

Anderson—C. C. Nash, Palestine.
Atascosa—W. A. Davis, Jourdanton.
Bell—G. S. McReynolds, Temple.
Bexar—Frank Paschal, C. D. Dixon, San Antonio.
Bosque—W. T. McNeil, Valley Mills.
Bowie—E. L. Beck, Texarkana.
Brazoria—F. R. Winn, Alvin.
Brown—H. M. McDaniel, Brownwood.
Burleson—J. B. Hunnicutt, Caldwell.
Caldwell—Edgar Smith, Lockhart.
Cameron—E. E. Dickason, Brownsville.
Camp—E. E. Bryson, Pittsburg.
Cherokee—E. E. Guinn, Jacksonville.
Childress—R. W. McFerren, Childress.
Clay—J. E. Moffett, Henrietta.
Collin—E. L. Burton, McKinney.
Collingsworth—H. B. Worley, Wellington.
Coleman—R. H. Cochran, Coleman.
Comanche—T. P. Weaver, DeLeon.
Cooke—J. E. Gilcreest, Gainesville.
Cornell—E. B. Baker, Gatesville.
Dallas—W. D. Jones, W. A. Boyce, Dallas.
Denton—G. D. Lain, Sanger.
DeWitt—G. W. Allen, Yorktown.
Donley—E. F. Hamm, Clarendon.
Eastland—C. O. Terrell, Ranger.
Ector-Midland-Martin-Howard—W. A. Lee, Garden City.
Ellis—W. P. McCall, Ennis.
El Paso—R. L. Ramey, El Paso.
Erath—J. A. Copeland, Lingleville.
Falls—N. D. Buie, Marlin.
Fannin—H. A. McDaniel, Bonham.
Fayette—C. M. Hoch, LaGrange.
Fisher-Stonewall—R. R. Allen, Roby.
Foard—Hines Clark, Crowell.
Galveston—W. F. Starley, Galveston.
Gonzales—W. T. Dunning, Gonzales.
Grayson—J. W. Carey, Sherman.
Gregg—L. N. Markham, Longview.
Guadalupe—M. B. Grace, Seguin.
Hale-Swisher—C. C. Gidney, Plainview.
Hall—W. S. Miller, Estelline.
Hamilton—C. M. Hall, Hico.
Hardeman—J. J. Hanna, Quanah.
Harris—J. Allen Kyle, Sidney M. Lister, Houston.
Harrison—G. W. Allen, Harleton.
Henderson—J. A. Fowler, Malakoff.
Hidalgo—J. M. Doss, Donna.
Hill—J. A. Speer, Hillsboro.
Hunt—A. S. McBride, Greenville.
Jefferson—D. S. Wier, Beaumont.
Johnson—Lee Yater, Cleburne.
Kaufman—B. J. Hubbard, Kaufman.
Kleburg—J. H. Shelton, Kingsville.
Knox-Haskell—W. P. Farrington.
Lamar—M. A. Walker, Paris.
Lampasas—D. W. Black, Lampasas.
LaSalle-Frio—E. M. Howard, Olney.
Lavaca—F. J. Guenther, Moulton.
Leon—E. P. Powell, Centerville.
Limestone—W. N. Brooks, Groesbeck.
Llano—Oscar Huff, Terrell.
McLennan—J. M. Witt, H. F. Conally, Waco.
Marion—J. A. R. Moseley, Jefferson.
Matagorda—A S. Morton, Bay City.
Menard-Kimble—W. M. Fenley, Menard.
Milam—G. W. Mullens, Milano.
Mitchell-Nolan—P. C. Coleman, Colorado.
Montague—N. W. Crain, Nocona.
Montgomery—W. N. Hooper, Conroe.
Morris—D. J. Jenkins, Daingerfield.
Nacogdoches—A. E. Sweatland, Nacogdoches.
Nueces—A. J. Caldwell, Corpus Christi.
Orange—W. P. Coyle, Orange.
Parker-Palo Pinto—J. H. Eastland, Mineral Wells.
Polk—C. H. Robinson, Cleveland.
Potter—G. T. Thomas, Amarillo.
Robertson—A. J. Sharp, Franklin.
Runnels—W. B. Halley, Ballinger.
Rusk—W. F. Sheppard, Tatum.
Sabine—T. B. Morgan, Bronson.
San Patricio—R. T. Goodwin, Sinton.
San Saba—A. D. Nelson, Richland Springs.
Scurry-Dickens-Kent—L. E. Trigg, Hermleigh.
Stephens—J. W. Wharton, Breckenridge.
Tarrant—S. J. Wilson, S. A. Woodward, Fort Worth.
Taylor—M. M. Carrick, Dallas.
Throckmorton—C. A. Turner, Throckmorton.
Titus—T. S. Grissom, Mt. Pleasant.
Tom Green—A. C. DeLong, San Angelo.
Travis—J. R. Nichols, Austin.
Trinity—W. H. Pope, Jr., Trinity.
Upshur—M. B. Richards, Ashland.
Van Zandt—DeLeon Sanders, Wills Point.
Washington—T. J. Pier, Brenham.
Wichita—A. D. Patillo, Petrolia.
Williamson—E. M. Thomas, Georgetown.
Wilbarger—Howard Reger, Mt. Vernon.
Wise—B. E. Braselton, Bridgeport.
Wood—C. D. Lipscomb, Quitman.
Young—W. H. Logan, Graham.

Ex-Officio Members of the House of Delegates.

Frank D. Boyd, President, Fort Worth.
Holman Taylor, Secretary, Fort Worth.
W. L. Allison, Treasurer, Fort Worth.
R. R. White, Trustee, Temple.
J. S. Turner, Trustee, Dallas.
John T. Moore, Trustee, Houston.
W. R. Thompson, Trustee, Fort Worth.
F. P. Miller, Councilor, El Paso.
N. J. Phenix, Councilor, Colorado.
W. C. Dickey, Councilor, Memphis.
S. C. Parsons, Councilor, San Angelo.
W. A. King, Councilor, San Angelo.
W. N. Wardlaw, Councilor, Corpus Christi.
T. J. Bennett, Councilor, Austin.
Walter Shropshire, Councilor, Yoakum.
Wallace Ralston, Councilor, Houston.
A. R. Sholars, Councilor, Orange.
Albert Woldert, Councilor, Tyler.
A. C. Scott, Councilor, Temple.
J. H. Ball, Councilor, Crystal Falls.
A. W. Carnes, Councilor, Hutchins.
W. H. Blythe, Councilor, Mt. Pleasant.
E. F. Cooke, Council on Medical Defense, Houston.
E. H. Cary, Legislative Committee, Dallas.
M. P. McElhannon, Legislative Committee, Belton.
J. H. Florence, Legislative Committee, Houston.

Fraternal Delegates.

J. T. Halsey, New Orleans, Fraternal Delegate from Louisiana.

W. L. Heizer, Bowling Green, Fraternal Delegate from Kentucky.

Seale Harris, Mobile, Ala., Fraternal Delegate from the Southern Medical Association.

M. Smith, Oklahoma City, Fraternal Delegate from Oklahoma.

The Secretary placed before the House the Transactions of the preceding Annual Session, as published in the June, 1914, Journal, which, on motion, were approved without being read.

The Secretary read his annual report, as follows:

Annual Report of the Secretary.

In accordance with custom and the requirements of the by-laws, I am pleased to herewith make a brief report of the affairs of my office for the official year 1914-1915.

First as to membership. It has heretofore been the custom to report the membership up to the opening day of the Annual Session, in order that delayed reports may be cared for, and as a matter of comparison. In this connection, it will be noted that the opening day of the session for this year is a week earlier than usual. In 1912 the Secretary reported a membership of 2,924 for the opening day; in 1913, 3,065; in 1914, 3,211. These reports show a steady and progressive increase in membership, which I am more than pleased to announce has been continued through the past year, and in increased ratio. There are today, so far as we have been able to gather the reports, 3,365 paid-up members, which it will be noted is an increase of 154 members over last year, 230 over the year before and 513 over the preceding year. This is a remarkably good showing when it is considered that the dues have recently been raised to care for Medical Defense,

and that the date of meeting is a week earlier than before. It will be recalled that a decrease in membership, at least for a while, was anticipated by many of our members when Medical Defense was adopted. It was thought, and with some reason, that an indefinite number of our members would hesitate to accept the raise in dues, because of the likelihood that Medical Defense would be misunderstood. For this reason, and because not even the advocates of the adoption of Medical Defense were able to predict with confidence the maintenance of membership under the circumstances, the present increase is peculiarly gratifying. In this connection, your Secretary may properly state that a greater proportion of the membership had paid dues up to the limit of time set for the filing of annual reports than ever before in the history of the Association. This would seem to indicate that our membership is alive to the advantage of Medical Defense, and is not inclined to take chances on being denied this privilege because of delinquency. In this connection, further, your Secretary desires to insist that county societies take this phase of the situation under careful consideration during the year, with a view to insuring their members against delinquency of this character. It is a fact that many of those who are now members, show on the books of the State Association as having been delinquent from the first day of January until the payment of their dues some time in April, following the expiration of the time limit. Should a suit be filed against any of these members for an incident said to have occurred during this period, the Council on Medical Defense would be powerless to assist them financially. They would be authorized, and would doubtless take pleasure in doing so, to extend moral support and every assistance possible, but they cannot, under the present interpretation of the by-laws, extend financial assistance. It must be borne in mind that the fund handled by the Council on Medical Defense is a trust fund, and may not be expended except as authorized by the by-laws. No matter how desirable it would be that an individual member should be protected by the Council, said protection could not be forthcoming except some provision in common law could be found to cover the case. If the State Secretary is called upon for a statement as to whether a member who is about to be sued was a member in good standing at a certain period, the State Secretary would have no alternative other than to report as shown on his receipt books and the membership list. This matter is mentioned here, and so emphatically, because of the extreme likelihood of an occurrence of this character, and because members under the circumstances are not likely to fully appreciate the issues while under fire. Speaking further on the subject of Medical Defense, your Secretary gives it as his unbiased and deliberate opinion that this innovation has been a distinct success and the practice of caring for our members when assailed in the courts for medical malpractice should be persisted in regardless of cost.

In last year's report the Floyd-Motley-Briscoe and the Grimes County societies were reported as having forfeited their charters, and I am pleased to announce at this time that Grimes county has been reorganized.

The following societies were at that time reported suspended: Deaf Smith-Randall-Castro, Fort Bend and Upshur. Of these, Fort Bend and Upshur have been reinstated. The Deaf Smith-Randall-Castro Society has not so far been reorganized.

Cameron County Society, reported last year as having been suspended for failure to make report, has been reinstated.

The following societies were reported as having less than the required membership, and for that reason were suspended: Dallam-Hartley-Sherman, Foard, and Haskell. Of these, Foard has reported the required number of members this year, and has by virtue of that fact perpetuated its charter. Haskell has united with Knox county in the formation of the Knox-Haskell County Society, and has been so chartered.

The following societies have so far not reported, and therefore stand suspended: Refugio, and Dallam-Hartley-Sherman.

The following societies have been chartered during the year: Tyler, Jack, and the Knox-Haskell combination, above mentioned. During the year, also, the district societies of the Eighth, Ninth, and Tenth Districts united under the name and designation, "South Texas District Medical Society," and the Fifth and Sixth District societies have combined, I presume, under the proper numerical designation. So far, no charter has been asked for and none issued by either of these reorganized societies. In order to keep the records straight, it would be proper for these societies to petition the Board of Councilors to take up their respective charters and issue new ones to cover the new condition of affairs.

Acting upon the authority of the President and the Board of Trustees, arrangements have been made with the American Medical Association for the joint employment of trained organizers to cover the State in the interest of both organizations and their respective activities. Three of these gentlemen have been for some time at work in different portions of the State, and reports are to the effect that they have been a great assistance to our Councilors and County Secretaries in securing new members, and smoothing down many rough places, in a manner best known to those who make such matters their life work. This work has not yet been completed, and the cost of same may not yet be estimated. It is quite likely, however, judging by partial reports and by the success of the same plan in other States, that the Association will in the long run profit materially from the investment. It is to be hoped that our secretaries and councilors and our members, as well, will give these gentlemen every assistance possible in prosecuting their work during the remainder of their stay in this State.

On the whole, it seems that the organization is more compactly and efficiently organized at the present time than ever before, and it is to be hoped that the improvement will be progressive, to the end that some day we may look upon each component society as a true unit in every sense of the word; that is to say, that each county society will be well organized and responsive to the demands made upon it by the central organization. This is not altogether true at the present time, although conditions are better in that respect than ever before. There are quite a few county societies in the State from which Councilors complain that they can receive no word as to the status of affairs as they relate to organized medicine, except by making a personal visit, and not always to any satisfactory extent even then. There are county societies in the State, many of them, that seem to have made little or no effort to keep a record of membership and other medical affairs so balanced and up-to-date that the annual report can be made out as called for. Very few of them have made any effort whatsoever to account for loss or gain of membership, in the appropriate portions of the report blanks. Of course, the State Secretary cannot get the records of the central office into anything like satisfactory shape until this is done uniformly throughout the State. Very few of the Secretaries make any very

great effort to give the exact address of their members, and much difficulty is experienced in getting the mailing list corrected to comport with actual conditions. Also, it is a fact to be commented upon, that very few of the reports are filed with the membership list in alphabetical order, and the initials and spelling of names properly checked over. All of these things make trouble in the office of the State Secretary, and they very likely account for the mistakes about which members frequently complain, and for which they often hold the central office entirely responsible.

During the present year the system of mailing out membership cards has been inaugurated, and it has been deemed advisable to send these cards direct to the individual member, rather than to the county society secretary. The intent and purpose of this practice is, that the member may be in a position to check up any error that may have occurred in either the office of the county secretary or the State secretary, using the one against the other. It has heretofore happened that members have been denied the prerogatives of membership for the period of a year, perhaps, all because their names have not been properly recorded in the office of the State secretary. Any error of this sort, no matter where the fault lies, will be readily located if the member makes inquiry for his membership card, and the correction will be made without the loss of a great deal of time. Now that membership carries with it the service of Medical Defense, this becomes a matter of considerable importance. It is to be hoped that the members generally will give the same attention to their medical society membership that they usually give to their fraternal order or lodge membership. In this connection, it may be proper to state that every effort is made to prevent mistakes of this character from occurring in the office of the State secretary, and so far, at least during the present year, no error of this character has been traced to our books. It has happened that names have been omitted from the mailing list, which has proven to be the fault of those upon whom we have depended to preserve the integrity thereof, and over whom we have no actual jurisdiction. In an office designed to accomplish its purpose at a minimum of expenditure in both help and equipment, such occurrences cannot be avoided.

I am directed by the Secretary of the American Medical Association to lay before the House of Delegates the following proposed amendments to the by-laws of said body, relating to the jurisdiction of the American Medical Association over constituent associations. The House of Delegates of the American Medical Association had this matter up for consideration during the annual sesion at Atlantic City last year, and passed the problem over to constituent associations for solution. The proposed amendments follow:

"That the second paragraph of Section 4, Chapter VII, be amended to read:

" 'The judicial power of the Association shall be vested in the Judicial Council, whose decision shall be final. This power shall extend to and include (1) all controversies arising under this constitution and by-laws to which the American Medical Association is a party; and (2) controversies (a) between a constituent association and a component society (or component societies) of another constituent association (or other constituent associations) or a member (or members) of another constituent association (or other associations), and (c) between members of different constituent associations. In all these cases the Judicial Council shall have original jurisdiction (10, 43).'

"Strike out No. 3—reading 'In all Cases,' etc.—and substitute the following:

" 'In all cases which arise between a constituent association and one of its component societies; between component societies of the same constituent association; between a member of a constituent association and the component society to which said member belongs; or between members of different component societies of the same constituent association, the Judicial Council of the American Medical Association shall have appellate jurisdiction (10, 44)'.

"The constituent associations herein referred to are those defined in Article 4 of the Constitution, and the component societies are the county or district medical societies which unite to support and maintain the several constituent associations."

State Associations hold no charters from the American Medical Association and are bound to that organization merely by resolution. At the present time, according to the by-laws of that organization, original jurisdiction, through the Judicial Council, extends only to cases pertaining directly to its own affairs. In all controversies between constituent associations or their members with other constituent associations or members, appellate jurisdiction obtains both as to law and fact, and the Judicial Council may "investigate general professional conditions and all matters pertaining to the relations of physicians to one another and to the public, and shall make such recommendations to the House of Delegates and the constituent associations as it deems necessary." The amendment proposed by the Judicial Council is that appellate jurisdiction be reserved to the American Medical Association in all questions "between a constituent association and one of the component societies, between component societies of the same constituent association, between a member of a constituent association and the component society to which said member belongs, or between members of different component societies of the same constituent association."

It is not likely that many State Associations will agree to this extension of jurisdiction until the relationship between constituent associations and the parent body has been established with sufficient clearness, and put on a sufficiently uniform basis to warrant the extension and acceptance of charters as at present contemplated. It is sought to make the Judicial Council the Supreme Court of the medical profession of the United States, which is an eventuality just as desirable between the State Associations as it is between States in our civil government. There is this difference, however, the relationship between the States is clearly defined and citizenship is not complicated with an extensive code of ethics.

I am also directed to refer to you the problem of caring for the widows and orphans of deceased physicians, a proposition covering this work on a national basis having been submitted to the American Medical Association for the past several years, and finally decided in this manner at the Atlantic City meeting last year. It was deemed by the House of Delegates of that organization best to permit each State to care for its own indigent physicians and the dependents of deceased physicians, in its own way. As we have already a committee concerning itself with the problem of caring for indigent physicians, it is respectfully suggested here that the problem of caring for widows and orphans of deceased physicians be also placed in the hands of this committee.

Another problem was dealt with by the House of Delegates of the American Medical Association at Atlantic City last year, which has a direct bearing

on the work of State Associations. The custom has heretofore been established by the American Medical Association of co-operating with any constituent association in any work of the national body which reaches directly into the jurisdiction of said constituent association, to the end that absolute harmony and co-operation may obtain. It seems that during the previous year two of the sub-committees of the Council on Public Health and Instruction had operated in a number of the States independently of constituent organizations, and the House of Delegates reiterated its stand on this subject, and directed that henceforth the rule be observed more closely. It is proper to state that so far as I know, there has been no further violation of this rule on the part of any sub-committees of the Council on Public Health and Instruction. However, the Council on Medical Education has been operating within the jurisdiction of the State of Texas, appointing independently of our organization a committee to investigate hospitals with a view to determining whether there is sufficient opportunity for internship to make it a requirement of medical education. While it is probable that not a great deal of harm will be done in this particular instance, although the appointment of one of the committeemen practically disorganized the work of one of our own sub-committees, it is well for us to reiterate our indorsement of the above rule, as established by the House of Delegates of the American Medical Association, and I so recommend.

The usual effort has been made to so arrange the annual program as to avoid conflicts, and at the same time give the several sections their turn at the most desirable places and the most favorable circumstances. As is well known to the membership of the House, the Section on Ophthalmology, Otology, Rhinology and Laryngology is permitted to operate without regard to the other sections, and the Sections on Surgery and Medicine and Diseases of Children may not conflict. This materially alters our opportunity for absolute rotation, and it is sometimes necessary to defer the opportunity of a section to another year.

An innovation has been attempted this year, in that a joint session of all scientific sections will be held on the afternoon of Wednesday, at which time the subjects at present under investigation by the Association, upon the direction of this House, will be considered. I refer to the work of the sub-committees on the study of Venereal Diseases, Pellagra and Cancer. I recommend, in view of this arrangement, that the report of said committees be referred to this joint section immediately that they are filed in the House.

I believe I may honestly state that there has been little friction between the office of the State Secretary and its members, or constituent societies, of which fact the State Secretary and his force are very proud. I do not attempt to disguise the fact that there have been occasions of temporary misunderstanding, most of which have been amicably settled and to the satisfaction of all concerned. As a matter of fact, the work of this office has accumulated in such a manner and to an extent so unprecedented, that we have not been able to give the satisfaction we would very much desire to give, and we have repeatedly had to apologize to our correspondents for delays that were absolutely unavoidable. There have also occurred a few errors, principally in the matter of addresses in the news columns of the JOURNAL, and in the mailing list of both the JOURNAL and the office, but they have not been many, and in no instance have they been through willful neglect or carelessness. In general we have sought to conserve the funds of the Association and have a few employees do the work with some delay, rather than to employ many in order to secure expedition and absolute accuracy. It is anticipated, of course, that our facilities for work will be increased as the income of the Association is increased, and as the requirements in other directions are lessened. During the past year the Trustees have seen fit to supply the office with a complete dictaphone set, which is serving materially to relieve the congested correspondence and to facilitate the work in general. It is hoped in this manner to give better satisfaction hereafter, and at a less expense than would be the case if additional help were required.

Finally, I desire to extend my profoundest gratitude to the members of this body and the Association in general, for their tolerance and kind consideration. Fraternally submitted,

HOLMAN TAYLOR, Secretary.

The Treasurer, Dr. W. L. Allison of Fort Worth, then read his annual report, as follows:

ANNUAL REPORT OF TREASURER.

I beg leave to hand you herewith my report as Treasurer, for the year 1914-1915. The account is deposited with the First National Bank of Greenville. This institution has been very kind to us, and is entitled to our appreciation for favors shown. You will note they have paid us six per cent interest on daily deposits, which interest amounts to $690.84. The balance on hand April 30, 1914, and in the bank, was $13,772.23. The amount deposited during the year was $16,737.01, making a total of $30,509.24. The disbursements, by voucher and check, and the exchange charged upon the disbursements, between the banks, amount to $13,104.90. The total receipts less disbursements, leaves a balance of $17,404.34; adding the interest fund of $690.84, makes a total balance in the bank April 30, 1915, of $18,095.18.

The Medical Defense Fund is deposited with the Association funds. The total amount of Medical Defense money deposited by the Treasurer, is $3,217, and the interest at six per cent on the daily deposits amounts to $17.44, a total of $3,230.44. The expenses charged to this fund amount to $564.80, which leaves a balance in the Medical Defense Fund of $2,665.64.

Balance on hand April 30, 1914 ..... $13,772.23

Deposits.

Date	Amount	Exch.	Balance	
May 26, 1914	$ 1,004.69	$ 3.68	$ 1,001.01	
June 30, 1914	497.46	1.20	496.26	
July 11, 1914	178.45	.60	177.85	
July 25, 1914	208.40	1.30	207.10	
Aug. 1, 1914	219.92	.....	219.92	
Aug. 15, 1914	359.76	2.05	357.71	
Aug. 31, 1914	289.77	.....	289.77	
Sept. 5, 1914	150.86	.....	150.86	
Sept. 19, 1914	177.55	.....	177.55	
Sept. 30, 1914	25.50	.....	25.50	
Oct. 13, 1914	331.31	.....	331.31	
Nov. 4, 1914	327.21	.65	326.56	
Nov. 30, 1914	291.77	1.20	290.57	
Dec. 12, 1914	190.56	.....	190.56	
Jan. 2, 1915	309.65	.....	309.65	
Jan. 21, 1915	325.23	1.10	324.13	
Jan. 30, 1915	741.10	1.95	739.15	
Feb. 12, 1915	1,187.26	1.80	1,185.46	
Feb. 20, 1915	500.57	1.05	499.52	
Feb. 27, 1915	204.90	.....	204.90	
Mar. 13, 1915	1,132.33	1.95	1,130.38	
Mar. 27, 1915	1,845.99	3.30	1,842.69	
April 5, 1915	2,297.07	4.20	2,292.87	
April 13, 1915	1,960.97	3.45	1,957.52	
April 24, 1915	393.00	.....	393.00	
April 24, 1915	1,618.06	2.85	1,615.21	
Totals	$16,769.34	$32.33	$16,737.01	$16,737.01
Grand Total				$30,509.24

Disbursements.

Date	Check No.	Voucher No.		
May 27, 1914	13	245	$ 1,500.00	
June 22, 1914	14	246	1,600.00	
July 29, 1914	15	247	1,500.00	
Aug. 28, 1914	16	248	795.51	
Sept. 30, 1914	17	249	976.12	
Oct. 3, 1914	18	250	735.74	
Nov. 28, 1914	19	251	760.00	
Dec. 2, 1914	20	252	111.65	
Dec. 30, 1914	21	253	859.50	
Jan. 9, 1915	22	254	175.00	
Jan. 28, 1915	23	255	976.91	
Feb. 23, 1915	24	256	50.00	
Feb. 25, 1915	25	257	846.91	
April 1, 1915	26	258	830.61	
April 2, 1915	27	259	50.00	
April 17, 1915	28	260	393.00	
April 23, 1915	29	261	940.55	
Nov. 11, 1914, exchange not charged above			2.65	
Jan. 2, 1915, exchange not charged above			.75	
Total			$13,104.90	$13,104.90

Total Receipts	$30,509.24
Less Disbursements	13,104.90
Balance	$17,404.34
Interest 6% on daily balance of $11,514.00	690.84
Total balance in bank April 30, 1915	$18,095.18

Medical Defense Fund.

Amount deposited by Secretary		$ 3,213.00
Interest at 6% on daily deposit		17.44
Total medical defense receipts		$ 3,230.44
Amount spent by Secretary before loan	$171.80	
Amount of loan and interest paid	393.00	
Total spent from the fund	$564.80	$ 564.80
Balance of fund in bank		$ 2,665.64

Money Loaned Medical Defense Fund.

	Vouch.	Amt.	Int.	
Nov. 24, 1914	252	$111.65	6% to 4-15-15	$ 2.60
Dec. 29, 1914	254	175.00	6% to 4-15-15	3.05
Jan. 28, 1915	256	50.00	6% to 4-15-15	.60
Mar. 24, 1915	259	50.00	6% to 4-15-15	.10
Total Loan		$386.65	Total Interest	$ 6.35
				386.65
			Total	$ 393.00

April 15, 1915, Voucher No. 260 drawn from Medical Defense fund to pay total	393.00
Total Medical Defense fund in bank	$ 2,665.64
Total Association funds in bank	15,429.54
Total funds in bank	$18,095.18

Referred to Reference Committee on Finance.

THE PRESIDENT: Before we go any further, it is indeed a pleasant duty for me to have an opportunity of presenting to you a former Texan, a man who worked for organized medicine in the ranks here for years, a man who helped to put North Texas on the map. It was through his instrumentality, if I mistake not, that we of North Texas decided to join in with the new State Medical Association. I have the honor to present to you Dr. M. Smith of Oklahoma City, Fraternal Delegate from Oklahoma.

ADDRESS BY DR. M. SMITH.

I enjoy being with the State Medical Association of Texas once more, even as a Fraternal Delegate, more than any of you can appreciate. I was very much gratified at the report of your Secretary. Seven or eight years ago you lacked a great deal of having eighteen or twenty thousand dollars in your treasury, but through the instrumentality of a President, Secretary, Board of Trustees and Board of Councilors that are equal to any emergency, you have attained a financial plane by virtue of which you are able to take care of yourselves. I am indeed glad to see that you have a bank account today; that shows intelligence and good management. I thank you.

The Secretary then read the report of the Committee on Public Policy and Legislation, as follows:

REPORT OF LEGISLATIVE COMMITTEE.

Pursuant to instructions from the House of Delegates last year, your committee has entered into cooperative relationship with the Texas State Conference of Charities and Corrections, and the Texas Public Health Association, and together with these organizations has endeavored to perfect and secure the adoption by the State Legislature, of a revision of the Board of Health Law. The first measure presented to the committee for its consideration was rather elaborate, and, in view of the political situation of this State, altogether impractical. It was an ideal bill, but some years ahead of the times, to say the least of it. Following repeated conferences the bill was reduced to what we considered a practical and feasible instrument and was introduced into the Legislature by those members selected by the Texas Public Health Association. Even in this form there seemed to be little opportunity for the bill to pass, and it was re-revised on the advice of our friends in both branches of the Legislature. The new bill was substituted for that which already had a place, and was pushed by all parties concerned as vigorously as seemed wise under the circumstances. Owing to the early approach of adjournment, and the multitude of pet measures that were still on the docket for consideration, not to mention the unfortunate opposition offered by our misguided friends, the Christian Scientists, *et al.*, the measure was allowed to die on the calendar. It seems to have been simply a matter of lack of opportunity on the part of members of the House and Senate to give the bill the study it required to enable them to act. It can be readily understood that a conscientious legislator would hesitate to pass opinion and finally act on a measure of such importance as this, where there was more than one side to be considered, without an opportunity to go into its merits and demerits very carefully.

This bill has been published, and placed in the hands of each county society, and it is to be hoped that should the Governor deem it of sufficient importance to warrant consideration by the special session our members will see to it that their representatives and senators are thoroughly impressed with the necessity of giving it some attention and favorable consideration, if possible.

There were two or three minor measures that your committee gave its favorable opinion upon, but as none of them received more than passing notice and are not likely to come up again for two years, we deem it unnecesary to take up your time in this report for their consideration.

As had been anticipated, very early in the session the optometrists renewed their attack on the Medical Practice Act, and introduced the usual bill, with slight variation. This bill and the history of its stormy voyage through the Legislature to the shoals upon which it foundered have appeared in the JOURNAL in detail, and we deem it unnecessary to do more than make passing mention of the circumstances. The bill was introduced in the House by Representatives Templeton of Collingsworth and Mendel of Travis, and in the Senate by Senator McGregor of Austin. In the Senate there was very little activity in behalf of this measure. Senator McGregor seeming to be contented with having given it an opportunity to work out its destiny.

Incidentally, the Committee on Public Health in the Senate took occasion to indefinitely postpone the bill, which was rather effective as a measure of final disposal. This action was taken on motion of Senator Clark, to whom your committee is very much indebted for good and wholesome advice and co-operation in every proper manner.

The story in the House was quite different, the co-introducers of the bill being extremely active and rather solicitous as to the success of their pet measure. Ex-Senator John L. Peeler of Austin, had been employed by the optometrists to represent them in their efforts for this legislation, which completed a very effective team of coworkers.

We desire here to call attention to a piece of strategy that was rather good, if not effective. It seems that this maneuver did not originate in Texas, but has been utilized in other States more effectively than here. The bill was referred to the House Committee on Public Health as soon as it was introduced, and then without the knowledge of the members of the House generally, or any of our friends, was removed from the Public Health Committee, and assigned to one of the Judiciary Committees. A hearing was ordered, and in the absence of any opposition, and in view of the statement made by the proponents of the measure that the medical profession was satisfied with the elimination of the use of "drops" in the eyes, and the prohibition against the use of any title which would confuse the public mind as between physicians and those not entitled to practice medicine, the committee made a favorable report, with notice from Representative E. H. Grindstaff of Parker, of an unfavorable minority report. Learning of this condition of affairs, we, by making suitable representation by wire, secured a reconsideration by the committee, and appeared in force in opposition to the measure. We are indebted to Representative Blalock of the Judiciary Committee, for the rehearing. The entire day and part of the night was spent in arguing the question with the proponents, and your committee was of the opinion that the House committee was convinced of the injustice of the measure, and its probable ill effect on the Public Health. However, a vote was not taken on this occasion, and we assured ourselves of a majority favorable report before leaving the city. A few days later we received the astonishing news that a favorable majority and unfavorable minority report had been put out by the committee, and upon investigation we learned that the minority report contained the signatures of a majority of the committee. It seems that a meeting had been held at a time when the full committee was not present, not to comment further on the situation.

Later on in the session, and near its end, Representative Roger Byrne of Bastrop, made the statement that an attempt had been made by the proponents of this measure to bribe him into supporting the same. This resulted in the appointment of an investigation committee, and the speedy withdrawal of the measure from the consideration of the House. The result of the investigation has been published in the proceedings of the House, but Mr. Byrne has asserted, at least in the public press, that the committee's findings were not in accordance with the testimony adduced in the hearing. At any rate, it appears that the charges were not well founded, and now the optometrists, of course, are claiming that the whole affair was a frame up. Of course, this is not true, and we are in a position to develop the situation in a startling manner, should it hereafter become necessary.

This entire transaction is recounted in the March JOURNAL, beginning on page 475, and it should be carefully read by every member of the Association interested in legitimate medicine, and the protection of the public health.

Your committee desires to take this occasion to express its profound appreciation of the prompt and magnificent support given by county societies throughout the State. A simple notice to each society that this measure was about to be considered by the Legislature was sufficient to bring ample protest from home to various Representatives, which were very largely successful. Very naturally, we met the reverse of this condition, and it is worthy of note that Representative Grindstaff, who gave the original notice of a minority unfavorable report, reversed his position, and the reason he gave for it was that he had heard from home. Your committee assumes that he heard more strongly from the optometrists than he did from the medical profession, hence his position. In this connection, we might also mention the fact that one of the hardest conditions we had to face was a number of telegrams and letters from members of our Association indorsing this pernicious measure. We freely grant to our members the right of individual opinions on this as on other questions, but we respectfully submit that where ninety out of a hundred of our members are unquestionably opposed to the measure, the other ten should at least not contribute to the enemy the most useful ammunition they have, turning on their own brethren, with whom they happen to differ in opinion on an individual problem. They should consider the likelihood of their own opinions being treated in a like manner by others, and it is quite probable that they would feel very much hurt should circumstances be reversed in this respect. While these letters and telegrams were denied us, the optometrists claiming that it would be unjust to those who sent them to let the "whip" of the Association know who they were, we have been furnished a pretty fair list and know who they are. We have no intention of using this information in any manner whatsoever, and we most assuredly do not intend to make it public. We are commenting at this time in the hopes of preventing the occurrence hereafter. If there is to be opposition to the position taken by the Association on any of these measures, it should be made here and in the other representative bodies of the Association, and not surreptitiously by telegrams and letters sent to our enemies.

We desire to express our appreciation, also, of the support furnished us by the Optometry Committee, through its chairman, mainly. It may be worthy of remark, incidentally, that heretofore the charge has been made that the opposition to this measure was at the instance of the oculists of the State, and the fact that we always had a number of these on hand has been freely used against us. On this occasion we were particular not to have more than one or two oculists present, and they were committeemen, and this fact was likewise used against us, the statement being made at this time that only four or five members of the Association were against the measure, and that the oculists were generally favorable to the same.

The usual Masseur Bill was introduced, this time by Representatives Parker, McFarland, Cunningham and Mendell, in the House and by Senator..... in the Senate. This measure seems to have differed in no material manner from preceding attempts, and was of a piece with the Optometry Bill, as to its effect on the public health and the Medical Practice Act. It received practically no consideration from either branch of the Legislature, and died rather calmly on the calendar.

The State Health Department was successful after a time, and considerable effort, in securing the

passage of a bill providing an appropriation of $25,000 for the prevention of the entrance of bubonic plague into this State, which was a notable achievement. This measure was introduced in the Senate by Senator Clark, who largely engineered its passage through the Legislature. It seems that the measure was on one occasion practically killed and interred, but the presentation of certain data bearing on the commercial interests of the State proved a life saver, much to the gratification of friends of public health.

The State Board of Medical Examiners secured the introduction and eventually the passage of an amendment to the Medical Practice Act, providing for an increase in the fees for examination and licensure of practitioners of medicine. We knew nothing of this movement, and when the announcement came of the introduction of the measure, we were rather upset, not understanding the purpose or intention thereof. Upon receiving the assurance of those representing the Board of Medical Examiners that they had made certain that no further amendments would be permitted, our committee agreed to this, the first alteration of the Medical Practice Act since its passage in 1907. As a rule, the Association is opposed to any effort to amend the Medical Practice Act, because of the opportunity it gives opponents to medical legislation and the medical profession in general to secure amendments that will materially alter and largely injure the operation of this essential safeguard to the public health.

A farm for the feeble minded has been provided for, and has received the approval of the Governor. We are not informed as to the practical operation of this measure, but assume that it will meet to some extent at least, a requirement long felt in this State.

There were many measures pertaining to the public health introduced, and some of them are of sufficient interest to warrant further comment, but we can see no good to come of the additional time it would take to recite the circumstances, and we will not make the attempt.

Finally, it is our opinion that the present Legislature is favorable to the public health, and should the Governor give it an opportunity, we feel certain that some additional public health legislation may be secured with a minimum of effort.

Respectfully submitted,

F. D. Boyd, Chairman.
Holman Taylor, Secretary.
E. H. Cary.
J. H. Florence.
M. P. McElhannon.

Referred to Reference Committee on Reports of Officers and Committees.

The President then announced the special committees of the House, as follows:

Special Committees of the House.

Reference Committee on Credentials—Dr. W. C. Dickey, Memphis, Chairman; Drs. M. M. Carrick, Dallas: S. J. Wilson. Fort Worth; J. J. Hanna, Quanah; G. W. Allen, Harleton.

Reference Committee on Reports of Officers and Committees—Dr. M. B. Grace, Seguin, Chairman; Drs. C. C. Gidney, Plainview; J. Allen Kyle, Houston; A. C. DeLong, San Angelo; W. H. Walker, Wichita Falls.

Reference Committee on Resolutions and Memorials—Dr. E. F. Cooke, Houston, Chairman; Drs. Lee Yater, Cleburne; E. E. Dickason, Brownsville; B. E. Braselton, Bridgeport; C. D. Dixon, San Antonio.

Reference Committee on Finance—Dr. W. F. Starley, Galveston, Chairman; Drs. B. J. Hubbard, Kaufman; A. J. Caldwell, Corpus Christi; T. S. Grissom, Mt. Pleasant; W. A. Boyce, Dallas.

Reference Committee on Amendments to the Constitution and By-Laws—Dr. J. S. Turner, Dallas, Chairman; Drs. J. A. R. Moseley, Jefferson; W. P. McCall, Ennis; N. D. Buie, Marlin; H. A. McDaniel, Bonham.

Reference Committee on Scientific Work—Dr. A. C. Scott, Temple, Chairman; Drs. W. B. Halley, Ballinger; Hines Clark, Crowell; W. S. Miller, Estelline; A. E. Sweatland, Nacogdoches.

The Secretary then read the report of the Committee on the Sale of Poisonous Drugs, as follows:

Report of the Committee on Sale of Poisonous Drugs.

Your Committee on Sale of Poisonous Drugs begs to report that circumstances have not warranted any effort in compiling a list of poisonous and habit-forming drugs, such as should be withheld from the general public and sold only upon orders of physicians or stated authorities, as was the original intention of those promoting the movement resulting in the appointment of the committee. We assume that it was the purpose of the Association to secure through this committee the necessary data for the formation of a law governing the sale of poisonous and habit-forming drugs, and we have assembled quite a deal of data bearing on that subject. The services of the committee were offered the Committee on Public Policy and Legislation some time prior to the assembling of the Legislature, following which there has been no further activity on our part. Our information is that there was no opportunity to push such a measure through the Legislature, and the legislative committee thought it inexpedient to make the effort.

We recommend that this committee be discontinued, at least until another legislative year, when, if reappointed, it serve in the capacity of advisor to the Legislative Committee, which should, and does, according to our plan of organization, engineer and promote all public health legislation, on behalf of the State Association.

Fraternally submitted,

Frank D. Boyd, Chairman.
Holman Taylor, Secretary.
T. H. Cobble.
W. S. Carter.
W. D. Boyd.

Referred to Reference Committee on Reports of Officers and Committees.

The Secretary then read the report of the Committee on Transportation, as follows:

Report of Committee on Transportation.

Your Committee on Transportation begs to report first, that such services as were required and desirable were furnished the local Committee on Transportation in securing rates for the Annual Session of the State Association, which efforts, by the way, were eminently successful. There has been no additional concession made in the matter of rates over previous years, but the selling dates have been extended to permit our members to reach the place of meeting as early as Monday, and as late as Wednesday, on the reduced fare ticket. Heretofore the best that could be done in this respect was to permit members to arrive Tuesday and Wednesday morning, and it has been impossible to do that well from some portions of the State. We very heartily commend the efforts of the sub-committee in this particular.

We have had under consideration the matter of the selection of an official route to the annual session of the American Medical Association, which is to convene in San Francisco June 22d, extending through June 26th, and have finally decided upon the following, and so recommend:

The Texas & Pacific railway to El Paso, and the Santa Fe to San Francisco, by way of Los Angeles, returning by way of the Western Pacific and the Denver & Rio Grande railways, through Feather River Canon of California, Salt Lake City, through the Royal Gorge, Colorado Springs, Denver and the well-known scenic routes of Colorado. We further recommend that a stop-over of one day be provided in El Paso, permitting a side trip to Juarez, and that the side trip to Grand Canon be taken advantage of; and that if the party so desires when it has been assembled, the side trip to San Diego be made, including one or two days at that place going.

The selection of this route gives us a main line that extends directly across the State and to which parties may be joined at numerous junction points before or by the time El Paso has been reached, permitting the entire party to view the latter city and its neighbor across the line, and in a body visit the Grand Canon. As is well known, a companion exposition is being maintained in San Diego, and if the party desires to make that trip also a start will have to be made earlier than otherwise.

At this time we recommend that the start be made so as to permit the party to reach San Francisco Sunday, June 20th, which will give the party opportunity to secure hotel accommodations and get well located before the House of Delegates convenes Monday and the general body and the scientific sections Tuesday. The intervening Sunday and Monday may be utilized by those of the party who wish to attend the San Diego Exposition, or the San Diego trip may be arranged independently and to be taken following the adjournment of the annual session of the American Medical Association, and before beginning the return journey in earnest.

The Texas & Pacific railway agrees to operate a special train to California for this occasion for 125 passengers holding the "Special Excursion" ticket, or 100 holding the "Summer Tourists'" ticket. A special Pullman will be furnished for 25 tickets, and additional Pullman service for additional requirements. No Pullmans will be parked within one hundred miles of San Francisco. It is extremely desirable that those who expect to take this trip inform either the Texas & Pacific Railway Company or the State Secretary of their intention, in order that sufficient Pullman equipment may be secured in advance. Otherwise there is likely to be experienced some difficulty in this respect.

The rates for this occasion are as follows:

	Special Excursion.	Summer Tourist.
New Orleans	$57.50	$70.00
Shreveport	55.00	70.00
Dallas	52.50	65.00
Fort Worth	52.50	65.00
Sweetwater	50.00	60.00

The side trip from Williams to the Grand Canon will be $7.50 additional, but the side trip to San Diego will be free on "Special Excursion" ticket.

We strongly recommend the special excursion ticket as allowing ample latitude in the way of time extension and stop-over privileges, but individuals may make their own arrangements with the railroad selling the ticket, in that respect. Tickets sold at New Orleans and Shreveport may be returned *via* Kansas City and St. Louis at the rates quoted. Tickets sold at Dallas and Fort Worth and returning through Kansas City, would be $1.50 in addition, and returning *via* St. Louis $10.00 in addition.

Arrangements may be made at a small additional expense to return by way of all Pacific Coast points, St. Paul, Chicago, etc.

We desire to acknowledge receipt of an invitation issued by the Chicago Medical Society, for the Texas profession to join a special to be run out of that city under the auspices of the society, the State Association and the American Medical Association, and anyone desiring information in regard to this proposed trip may secure same by corresponding with Dr. R. R. Ferguson, 3923 North Peeler Avenue, Chicago. We do not deem it expedient to join this party from this section of the country. Respectfully submitted,

Holman Taylor, Chairman.
C. R. Hannah.
Joe Gilbert.
Joe Becton.
C. B. Williams.

Referred to Reference Committee on Reports of Officers and Committees.

Dr. J. M. Inge of Denton, then read the report of the Committee on the Care of Indigent Physicians, as follows:

Report of Committee on the Care of Indigent Physicians.

Your Committee on the Care of Indigent Physicians begs leave to report the following:

After considerable correspondence undertaken for the purpose of determining the number of physicians in the State whose condition is such that they require aid to give them the comforts of life during their declining days, and who would accept a home proffered by the State Medical Association of Texas, no information of any such has come to us. The secretaries of all district and various county societies have been addressed.

The cost of such a home as we would require is hard to estimate, as the cost would depend upon the capacity required and the number to be provided for. Such information must come from more extended investigation. No information of value is to be obtained from other State Associations. The Secretary of the American Medical Association has written us that the only one of these which provides for benevolence to its members is the Medical Society of the State of Pennsylvania. The by-laws which define and establish the activities of the Committee on Benevolence in this organization reads:

"The Committee on Benevolence shall consist of the Secretary, the Treasurer and three members, to be selected annually by the Trustees, at least one of whom shall be a Trustee. This Committee shall act in behalf of the Board of Trustees. The Committee shall select its own Chairman, Secretary and Treasurer, and shall have absolute and confidential jurisdiction over the distribution of such part of the Medical Benevolence Fund as may be placed in its hands. No money shall be paid from its treasury except on warrant signed by the Chairman and Secretary of the Committee, and an annual audit of its accounts shall be made by a committee of the Trustees. The names of the beneficiaries being omitted, all beneficiaries shall be designated by number, and after each annual audit all communications tending to show the personality of the same shall be destroyed. The Committee may solicit subscriptions, donations and legacies to be added to the principal of the Medical Benevolence Fund."

We find there are in several of the larger cities local societies which are interested in the relief of members of the medical profession and their dependents. These are conducted in different ways. For instance, in New York city there is a society which, nominally at least, appears to be conducted on the insurance plan. On the other hand, the Aid Association of the Philadelphia County Medical So-

ciety, which, by the way, is a corporation entirely independent of the Philadelphia County Medical Society, is conducted without the insurance feature and distinctly for the purpose of relieving the financial distress of physicians and their dependents. In Baltimore certain members of the profession conduct a home for widows and orphans of physicians.

We furnish these references in order to arouse among our members more intelligent thought, which may result in some definite plan of action. We suggest that a permanent Benevolence Committee be created, composed, at least in part, of some of the active permanent officials of the Association, such as members of the Board of Trustees, Councilors and Secretary, to be added to by the President, the committee so created to elect its own Chairman, Secretary and Treasurer, and provide the most practical methods of raising a Benevolent Fund, such fund to be used for the relief of distress among physicians, the building or establishing of a home for indigents to be a subject for future consideration of the committee.

The number of our craft or calling in Texas in need of financial relief is probably small, but there may be a limited number. As an evidence of this possibility, the Chairman of this committee received a letter from the wife of a physician, who she said was a regular physician in good standing, a member of his county society, who had recently suffered a long and continuous attack of sickness, which, added to other misfortunes, had reduced the family to a condition of actual want. Much good could be done in such conditions through the judicious and intelligent use of a benevolent fund. The spirit of benevolence, to give aid to those in need, becomes organized medicine, composed of those whose constant and persistent work and duty is the relief of the suffering and distress and the prolongation of the life of the inhabitants of every race and clime, and flooding with light and love the germ of good in every soul.

Respectfully submitted,
J. M. Inge, Chairman.
N. W. Crain.
J. W. Largent.

Referred to Reference Committee on Reports of Officers and Committees.

Dr. C. A. Smith of Texarkana, read the report of the Committee on Study of Pellagra, as follows:

Report of Committee on the Study of Pellagra.

On the recommendation of our recently retiring President, Dr. M. L. Graves, this honorable body authorized the appointment of a committee of three for the study of pellagra.

For the purpose of study and in order to cover the field thoroughly, the subject was divided into the following subdivisions:

(a) The cause and prevention of pellagra, given to Dr. W. F. Thompson, Beaumont;

(b) The epidemiology of pellagra, referred to Dr. K. H. Beall, Fort Worth, and

(c) Our present knowledge of pellagra and its treatment, to be handled by the Chairman, Dr. C. A. Smith of Texarkana.

On the invitation of the Chairman of the Section of State Medicine and Public Hygiene, each member of the committee has prepared a paper in the form of a discussion of the part of the subject assigned him, all of which are to be read at the General Meeting and Joint Session of All Scientific Sections, Wednesday, May 5th, at 2 p. m., hall No. 3, First Baptist church.

Inasmuch as these reports are somewhat long, and the matter they contain hardly suitable for a business session of the House of Delegates, it is recommended that these reports be referred to the General Meeting Wednesday afternoon, and that the same be read and discussed at that time.

Respectfully submitted,
C. A. Smith, Chairman;
W. F. Thomson,
K. H. Beall.

Referred to Reference Committee on Scientific Work.

The Secretary then read the report of the Committee on Revision of the Constitution and By-Laws, as follows:

Report of Committee on Amendments to the Constitution and By-Laws.

It seems that the preceding House of Delegates continued this committee with a view to the perfection of its work previously accomplished. The committee has individually given the matter consideration through the year, and there appearing to be no particular reasons for reopening the proposition at the present time, no meeting has been held, at least not until the opening of the Annual Session, at which time it did not seem desirable to attempt any further revision.

It is the understanding of the committee that the Council on Medical Defense has perfected the amendments to the constitution and by-laws covering its work, and the opportunity to consider the proposed amendments has been offered this committee. We consider it better to permit the amendments in question to come before the House, and be referred to the Reference Committee on Amendments to the Constitution and By-Laws, and that they be considered at the time the revised version supplied by this committee last year comes up for consideration.

There are some typographical errors in the original version, and a few minor corrections to be made. We recommend that the House of Delegates authorize the Secretary to make the corrections in question, provided that the sense of no paragraph or sentence is altered in any particular. The original version has been printed in the Journal, and has also been furnished each society in pamphlet form, and it is an easy matter to compare the version finally adopted with that recommended and passed upon by the House of Delegates; it is not considered an extension of undue authority to permit such corrective measure.

Respectfully submitted,
Frank D. Boyd, Chairman.
Holman Taylor, Secretary.
Marvin L. Graves.
I. C. Chase.
A. C. Scott.

Referred to Reference Committee on Revision of Constitution and By-Laws.

The Secretary read a telegram from Dr. W. L. Rodman of Philadelphia, President-Elect of the American Medical Association, regretting his inability to attend the session, because of unforeseen circumstances, and announcing his intention of visiting the State during the meeting of the Southern Medical Association, in Dallas, in November.

The Secretary read a telegram and a letter from Dr. Isadore Dyer of New Orleans, expressing regret that he could not attend the session, because of a sudden call to Washington on matters pertaining to medical education, and announcing the substitution of Dr. J. T. Halsey of New Orleans, as Fraternal Delegate from Louisiana.

The Secretary read a telegram from Dr. A. T. McCormack, Secretary of Kentucky State Medical Association and the Kentucky State Board of Health,

relating to the appointment of Dr. W. L. Heizer as Fraternal Delegate from Kentucky and representative of the Board in the patent medicine investigation being conducted by that body.

The Secretary read a letter from the Fort Worth Lodge of Elks, extending the use of their club rooms to the visiting physicians and their families.

These communications were received and filed.

The Secretary read a letter from the Texas Association of Medical Directors, regarding a name for the Insurance Section, which was referred to the Reference Committee on Revision of the Constitution and By-Laws.

THE SECRETARY: Under the head of unfinished business, I desire to lay before this body the proposed revision of the constitution and by-laws received by this House of Delegates last session and tabled for consideration at this time. I move that this constitution and by-laws be removed from the table and referred to the Reference Committee on Amendments to the Constitution and By-Laws.

The motion was duly seconded and carried.

The President then read his Message to the House of Delegates, as follows:

THE PRESIDENT'S MESSAGE.

Pursuant to instructions from the House of Delegates, I have appointed the following new committees: Committee on Defectives and Dependents; Committee on Public Health; Committee on Sale of Poisonous Drugs; Committee on Medical Education; Committee on Care of Indigent Physicians; Committee on Study of Cancer; Committee on Study of Pellagra; Committee on Study of Venereal Diseases. Likewise and for the same reason, the following committees have been abolished: Committee on Institution for the Care of Indigent Consumptives; Committee on Care and Treatment of the Insane; Committee on Revision of School Text-Books.

In answer to a petition from several of our members, who profess to be in a position to make such a project a success, I have assumed to appoint a Committee on Scientific Exhibits, which committee has been instructed to prepare and present for the inspection of those of our members who visit the Annual Session an exhibit of such scientific material as may be gathered, and as may be of interest to the medical profession in general and any portion of it in particular. It was my understanding that the several medical colleges in the State would unite to supply this exhibit with rare and interesting pathological specimens and that certain private hospitals and practitioners of special branches of medicine, notably the *x*-ray and electrical workers, would join hands in presenting exhibits of scientific and technical interest to their fellows and all of those who may be interested in their particular branch.

Following the request of the Texas Public Health Association, I appointed the Chairman of a Committee for the Study of Cotton Seed Meal as a Food for Humans, who was authorized to appoint the other members of the committee, limiting the number to five. It seems that this particular subject is under lively consideration by certain interests, and the promoters of the movement desire the influence and skill of the State Medical Association in working out the problem. I was unwilling to assume any responsibility for the work of any investigating committee, except we were represented on a par with all other agencies, and hence the appointment mentioned.

Learning from the Chairman of the former Committee on Revision of School Text-Books that the work of his committee had not been completed and that there were some important matters yet to be considered, I took the liberty of reinstating the committee, in the person of the Chairman, and authorized him to proceed to close up all pending matters.

With reference to the committee work of the Association, I am rather inclined to the opinion that there are entirely too many committees, with a consequent wide division of responsibility. It is questionable whether a committee appointed to consider a single subject or a certain condition of affairs, can maintain its usefulness for any considerable length of time. That is, unless a fight is on of sufficient interest to keep the membership, and particularly the committee, in active alignment. A committee will either accomplish its work in a short while, or fail. In any instance, it would probably be better to relinquish the effort and try again later on, at a more opportune time. For instance, the Committee on Public Policy and Legislation is designed to care for, and should by all means be exclusively responsible for, any legislation of interest to the Association. Such committees as those on optometry legislation, sale of poisonous drugs, and perhaps that on defectives and dependents, can properly perform their functions only through the Committee on Public Policy and Legislation, and they thus become merely advisory or technical committees, with no authority or function, save to look into the particular question and phase of the legislative situation to which they are assigned. The Committee on Defectives and Dependents is not entirely a legislative committee, as the name denotes, but there seems to be at the present time, for instance, no special purpose for this particular committee. The Committee on Public Health is designed to serve in the nature of an advisory committee to the Committee on Public Policy and Legislation also, but it is likewise freighted with the duty of rendering assistance to the Councilors in prosecuting their work in their respective districts. It is questionable whether the full purpose of this committee will ever be realized under our present plan. It is my opinion that those committees which are intended to be substantial and permanent features of the Association machinery, should be promoted to the degree and dignity of the so-called "Councils" and the tenure of membership thereon should overlap, as is now the case with the Council on Medical Defense; and vacancies should be filled much in the same manner. Such committees as that on Revision of the Constitution and By-Laws, Care of Indigent Physicians, and the scientific committees, clearly have a specific object to attain and should be abolished immediately that they have attained that object, or as soon as it becomes apparent that the object is not attainable by the present plan of operation. Such is clearly within the province of the President to regulate, but our presidents are usually not thoroughly acquainted with the inside workings of the Association, and they are usually about to relinquish office before they get thoroughly in touch with the situation. The proposed amendment to the by-laws providing for a president-elect will largely eliminate this, and will to some extent modify the force of my views on this subject. However, I would strongly recommend the earnest consideration of the following:

(1) That the Committee on Public Policy and Legislation be made a Council on Public Policy and Legislation, or a Council on Legislation and Public Instruction; that the council consist as at present, of the President and Secretary, *ex-officio*, and that the other three members be appointed for terms of three years each, so that one new member may be

added each year; and that the said new member be elected by the House of Delegates upon nomination of the retiring President.

(2) That all supplementary legislative committees except those that are at the time clearly indicated, be abolished and the President be authorized, as now, or upon request of the Council on Legislation and Public Instruction, to appoint such subcommittees as are needed, and at such time as they are needed. This would include the Committee on Optometry Legislation; Committee on Defectives and Dependents; Committee on Public Health, and the Committee on Sale of Poisonous Drugs.

(3) That the Committee on Medical Education be continued, and directed to get in touch with the Council on Medical Education of the American Medical Association, and act in co-operation with that body in dealing with the medical education situation, as it exists in this State. In this connection, I would strongly urge that the incoming President communicate with the aforesaid Council on Medical Education, with a view to ascertaining whether the said council has any preference in the matter of appointees on this committee, thereby avoiding conflicting interests, as is conceivably possible under the present plan, which I understand is for the Council on Medical Education to prosecute its own work in its own way in this State, regardless of the activities of others. I would also urge that the several medical colleges in the State be given representation on this committee, so far as it is possible, in order that the decisions of the committee may be free of any suspicion of bias, thereby becoming more effective and of greater value to the cause of medical education.

I have long observed that the activities of the Association, no matter how important, or how unimportant, practically all come up for consideration at the same time, and in such conflicting channels that they are generally more or less slighted. Those of us who occupy official positions, including committeemen, have but scant opportunity during the year to get together for a conference, and for a division of labors, and it is generally the case that chairmen feel that they can get their committees, or their respective groups, together during the Annual Session and thrash out the several problems that are before them. This may be entirely feasible, but it is more often not so. I have sought during my term of office to correct this fault to a certain extent, by holding a conference of the official family at a central point and during the winter months. It is my deliberate opinion that this conference was of great benefit to all of us, and that the year's work has been all the more successful because thereof. No one was compelled to attend this conference, and it is surprising what a large proportion of even the lesser important committees were present, and the amount of interest displayed by every one. I commend this idea to my successor in office.

Supplementary to the efforts here outlined, I now have to recommend to the House of Delegates that the Monday preceding the regular opening of the Association be designated "The Official Conference Day," and that all of those freighted with the responsibilities or the Association, no matter what the purport, be invited and requested to assemble in their separate groups on this day for final conferences and preparation for the work of the Association, and particularly of the House of Delegates.

I further recommend, in this connection, that Monday evening be designated as Public Health Evening, and that hereafter local committees on arrangements be directed to plan a mammoth public health meeting for the occasion, if such a project would seem feasible and profitable under the peculiar circumstances surrounding the particular community in which the sessions are to be held. I am sure I need comment no further on the advantages of such public health meetings, the recent examples that are now matters of history, and are doubtless well known to the members of this House of Delegates, rendering it unnecessary for me to do so.

It has also been my observation that the expense to which communities in which our annual sessions are held are usually put to, is considerable and beyond all necessity. I have striven to find in my own mind a way to cut down the expense of entertainment incident to these annual sessions, but I find it extremely difficult to recommend anything in the way of dictation to those who are hereafter to serve as our hosts. It is clearly evident to the thoughtful observer that the communities in this State capable of entertaining the State Medical Association and providing for its annual sessions, are becoming fewer and fewer, and those which are willing to assume the burden of this entertainment are becoming even fewer. It seems to me that the State Medical Association of Texas is big enough and strong enough to pay its own expenses, and it is. However, much of this entertainment is not necessary, and is only for those who care to enjoy it. This would lead me to suggest either that those who care for this entertainment be required to pay for it, or that every one who registers at the Annual Session be required to pay a stated sum, to which the community in which the meeting is held may add more or not, just as it pleases. Should this registration fee be made as much as $2.00, the usual entertainment extended could doubtless be provided without additional expense to the community, and even a registration fee of $1.00 would serve to lessen the burden to the point where the frequent return of the Association to a particular community would not be a burden to be avoided. I do not consider that any community which has had the honor and pleasure of entertaining the State Medical Association begrudges the cost of same, or would have had the opportunity denied it, as the advantages are manifold and great; but a frequent repetition of the burden could conceivably surpass the requirements of the average large community in this State. I commend this idea to the careful consideration of this House and its reference committees, and while concrete action may not be had at this time, the idea can be passed on until the problem is either solved through this or some other suggestion.

I have given some attention to the work of Medical Defense during the first year of its operation, and I am acquainted with the proposed amendments to the constitution and by-laws to be advanced by the Council on Medical Defense, during this session of the House of Delegates. I heartily join with the Council in their recommendation, and particularly would I urge that the members of the Council be granted full membership in the House of Delegates, with the privilege of vote. I make this recommendation notwithstanding that I am generally opposed to greatly increasing the membership of the House, particularly from the ranks of permanent committees or councils, which ever the case may be, because I have noticed that those who are granted membership in the House of Delegates without the right to vote usually do not take a great deal of interest in the transactions of the House, and as the advice and counsel of this particular body is very much needed, we should neglect no opportunity to impress the value of this service upon the members in question.

I desire to mention one other requirement of the Council on Medical Defense in the matter of amend-

ment to the by-laws, and that is that the committees to be appointed to investigate any given case or malpractice suit be appointed by the Council, or that the Council proceed in any way it sees fit to investigate the said case, without the necessity of a committee of any character. It seems that the degree of publicity incident to the present method of having a county society committee to investigate these cases is objected to by many of the litigants, and notwithstanding the fact that the said committees are not supposed to make report to their respective county societies, they sometimes are required to do so, which, in effect, is a double trial for the individual members in question. It would seem that it is quite sufficient for the Council on Medical Defense to be assured that any particular member is entitled to Medical Defense by virtue of his membership and because of the justice of his defense.

The Secretary will lay before you proposed amendments to the by-laws of the American Medical Association relating to the jurisdiction of the said American Medical Association over constituent associations, which have been referred by the former body to this Association, for consideration and recommendation. I refer to the proposed amendment to Section 4, Chapter VII, of the American Medical Association by-laws, which is fully set out in the report of the Secretary, and which will be delivered to you in due time and in due shape. The opinion of the State Secretary on this proposition meets with my entire approval, and is, in fact, the result of a conference recently held by us on this subject. In order to save time and not burden you with duplicate recommendations, I content myself with recommending that this House of Delegates direct its representatives to the House of Delegates of the American Medical Association, to proceed with extreme caution in agreeing to or binding the State Association to agree to, the further extension of absolute jurisdiction on the part of the American Medical Association, until the matter of uniform membership may be more nearly settled, to the end that no such disturbing element as the race problem may be allowed to enter between the profession of this great country, of which we are so proud, and in which we have aspirations to become so important a part.

In the matter of the proposed revision of our own constitution and by-laws, I recommend that this body re-refer these by-laws to its reference committee immediately, and that a report be requested for tomorrow, in order that the entire revision may be voted upon and made official on the subsequent day. I recommend, also, that the additional amendments to be proposed by the Council on Medical Defense, and also by the Committee on Revision of Constitution and By-Laws, be received today, if possible, and referred to the same reference committee, and at the same time, in order that the whole may be nicely co-ordinated before being brought into this House for final action.

Finally, I beg to assure the House that I have been zealously careful of the reputation of the Association during my incumbency, and have striven in every way possible to render assistance to the committees and other officials, to the end that all of the work may be brought into harmony, and the best possible results attained. As a matter of fact, there isn't a great deal of responsibility placed upon the shoulders of the President, as to matters of detail, and it becomes necessary for the President, if he would be useful, to seek places for service and be not backward in offering advice. I again thank you for the honor you have conferred upon me.

Fraternally and respectfully,

FRANK D. BOYD, President.

The President's Message was referred to the Reference Committee on Reports of Officers and Committees, except that portion which pertained to the proposed amendments to the constitution and by-laws, which portion was referred to the Reference Committee on Amendments to the Constitution and By-Laws.

The President introduced Dr. J. T. Halsey of New Orleans, Fraternal Delegate from Louisiana, who stated that Dr. Dyer had been summoned to Washington to take part in certain educational deliberations, and that for that reason he would be unable to attend the meeting of the State Medical Association of Texas. Dr. Halsey placed himself at the disposal of the Association.

Dr. W. D. Jones of Dallas, read the report of the Council on Medical Defense, as follows:

REPORT OF COUNCIL ON MEDICAL DEFENSE.

The Council on Medical Defense begs to submit the following report:

The amendments to the constitution and by-laws creating a Council on Medical Defense were passed by the House of Delegates May 13th, 1914, at the Annual Meeting in Houston, and upon nomination of the retiring President the present Council was duly elected by the House of Delegates.

According to our amendments, Medical Defense was in force immediately after adoption. No funds had been provided for the use of the Council, as the annual dues for the current year had been paid, and it was necessary to borrow $1,000 from the Board of Trustees to carry on our work until the annual dues for 1915 should be paid and the fund for Medical Defense set aside.

At our first meeting, June 17th, 1914, we made application to the Board of Trustees for a loan of $1,000, executing a note bearing six per cent interest on the amount we might take from the interest-bearing funds of the Association.

The House of Delegates at Houston adopted the following resolution:

"Be it resolved, by the House of Delegates, that the Council on Medical Defense be and they are hereby authorized and empowered to investigate the working of the Physicians' Indemnity Exchange, and other such indemnity companies, and if in their judgment they deem it advisable, report their findings to the Board of Trustees, who are hereby authorized to enter into some working agreement whereby both defense and indemnity may be secured to the members of the State Association without duplicating the cost."

Accordingly our secretary took the matter up with the several indemnity insurance companies doing business in Texas, and our plan of co-operation eventually laid before them. Three companies have decided to enter into a working agreement which is entirely satisfactory to the Council. However, and in this connection, we want to emphasize the fact that such indemnity insurance is entirely optional with our members. The object is mainly to secure harmony, if possible, between the Council and insurance companies writing liability insurance, and provide helpful co-operation and money protection for those who want it. The following companies have entered into this agreement:

Physicians' Indemnity Exchange of Sherman;
Western Indemnity Company of Dallas;
U. S. Fidelity & Guarantee Company of Maryland.

In regard to the matter of enforcing our Medical Practice Act, we have had applications for assistance from two sections of the State—Sherman and Rockport—but on account of lack of funds we have been unable to render them financial aid. We hope, however, in the near future to give assistance where the membership is small, in ridding communities of

quacks and illegal practitioners. It is not a burden on a county society with a big membership, to prosecute these quacks. We advise patience along this line, as we are running two years' expense on one year's budget.

We beg to advise, as we have done before, that our members be exceedingly careful in the matter of criticising, by word or action, a brother practitioner's work.

Before going into detail regarding the work of the Council for the past year, we wish to commend the manner in which the profession has co-operated with the Council and with one another in the communities where damage suits have been filed. We believe the good accomplished in securing harmony and co-operation among our members is well worth the price, if no other benefit were derived from Medical Defense.

We wish also to mention another beneficial feature of this plan. The State Secretary informs us that on April 30th, 1914, our paid-up membership was 2,720; on April 30th, 1915, our paid-up membership was 3,283. At our annual meeting in 1914, our membership, including those who paid during the meeting, was 3,211. Our paid-up membership for 1915, to date, is 3,365. There has been a net gain of 154 in our membership.

We have had five meetings of the Council. The first was on June 17th, 1914, in the JOURNAL office, with the Chairman and Secretary present.

On July 29th, 1914, the Council met in the JOURNAL office with all members present. Our President, Dr. Frank D. Boyd, and Judge J. A. L. Wolfe, were present by invitation. At this meeting the Secretary was directed to correspond with the insurance companies writing physicians' liability insurance in Texas. The Chairman was directed to refer all matters requiring the attention of an attorney to Judge J. A. L. Wolfe of Sherman, until otherwise directed.

On October 22nd, 1914, the Council met at the Westbrook Hotel, in Fort Worth, with the Chairman, Secretary and Dr. W. A. King present; Dr. F. D. Boyd, our President, and Judge J. A. L. Wolfe were present by invitation. The Secretary laid before the Council correspondence with numerous indemnity insurance companies. On account of failure to hear from some companies, this correspondence was continued. The Board of Trustees loaned the Council $1,000, and a note for that amount, made payable to the Board of Trustees of the State Medical Association, was signed by the Chairman and the Secretary of the Council.

On November 14th, 1914, the Council met in the English Room of the Adolphus Hotel, Dallas, with all members present, and Judge J. A. L. Wolfe present by invitation. Judge Wolfe was unanimously elected general attorney for the Association, on the following terms:

General retainer of $300 per annum; additional fee of $25 per day and expenses when attending court on the business of the Council, under direction of the Council, providing such service is rendered outside of his home town; services extraordinary to be paid for in each instance upon a basis to be agreed upon between the Council and the general attorney.

On April 15th, 1915, the Council met in the JOURNAL office at Fort Worth, with all members present. General Attorney Judge J. A. L. Wolfe, and our President, Dr. F. D. Boyd, were also present. At this meeting we took up the note of $1,000 covering the amount we had borrowed from the Board of Trustees. The committee then reviewed the cases pending against our members. Since the adoption of the Medical Defense there have been filed six suits against members, all of which are now pending in the various District courts of Texas, as follows, according to the report of Judge Wolfe, our general attorney:

(1) Numbered 37293 on the docket of the District Court of Tarrant County; suit by plaintiff to recover damages in the sum of $10,000. This suit, though filed June 16th, 1914, has never been set for trial by plaintiff.

(2) Numbered 1763 on the docket of the District Court of Atascosa County; filed September 11th, 1914. Suit by plaintiff to recover $20,000. Defendant having contracted with local council for his defense prior to the time of reporting the suit to the Council on Medical Defense, his employment of counsel was ratified, and by agreement he was allowed $200 to cover counsel fees, which was entirely satisfactory to the defendant.

(3) Two suits filed against one defendant in the District Court of McLennan County, styled and numbered as follows:

Number A-4442, plaintiff seeks to recover the sum of $25,000 actual and $10,000 exemplary damages.

Number A-4441, plaintiff seeks to recover the sum of $25,000 actual damages.

Plaintiff employed and contracted with local counsel before same was reported to the Council on Medical Defense. The Council will make the usual allowance to plaintiff in defraying the expenses of these suits.

(4) Numbered 7709 on the docket of the District Court of Fannin County; filed January 12th, 1915. This is a joint suit against two physicians, one in arrears with dues to the State Association, the other defendant in good standing, with dues paid up. By request of the defendant, our General Attorney took charge of his case. Suit was set for trial February 15th, 1915, and was continued for the term by the plaintiff. Plaintiff in this suit seeks to recover the sum of $20,000 as actual damages.

(5) Numbered 526 on the docket of the Seventy-fourth District Court of McLennan County. Plaintiff seeks to recover the sum of $5,000 actual and $5,000 exemplary damages. In this case, one-half the expense of the defense will be borne by the Physicians' Indemnity Exchange, and the other half by Council on Medical Defense.

We have given our moral support in a case numbered 31075 on the docket of the District Court of Travis County. This suit was filed in April, 1914, prior to the adoption of Medical Defense. In this case, the physician is made a party to a suit with an insurance company. The case was tried and same resulted in a mis-trial. The failure to agree on the part of the jury was as to the liability of the indemnity company. Had it not been for this, the physician would have been acquitted from all liability.

There have been three threatened suits reported to the Council, two of which we are practically assured will never materialize. In one of these the physician, over our protest, prevented suit from being filed by giving plaintiff $150. In another we have statements from all parties concerned, and feel sure the action will be dropped. In the other the circumstances are being investigated, and at present the data is not fully in hand.

Acting on the advice of the general attorney, the Council has adopted the following fee bill:

A—Preparing each case for trial, including filing of answer and disposition of demurrers and dilatory pleas	$100.00
B—For trial of case once	100.00
C—Subsequent trials of same case	50.00
D—Preparing record for appeal	35.00
E—Preparing brief on appeal	25.00
F—Arguing case in appellate court	50.00
G—When required to leave home on business for Council, $25.00 per day and actual expenses.	

We have found that our by-laws need some changes, and at our last meeting we decided to submit to the House of Delegates the following proposed changes:

Amend Sec. 1, Article IV, page 4 (of the printed revised version), by inserting in the sixth line of the paragraph, following the word "Trustees," the words "The Council on Medical Defense," to be preceded by (4); the balance of the section to remain as it is, with the figure (4) as noted, changed to the figure (5).

Amend Sec. 2, Article IV, of the constitution by erasing from the first line of the section the words "The Council on Medical Defense," and beginning

the section with the next word "The" with proper capitalization.

These two amendments will have the effect of giving the Council on Medical Defense full membership in the House of Delegates, on a par with the Board of Councilors and Board of Trustees.

Amend the by-laws by adding the following by-laws relating to Medical Defense as Chapter VII, correcting the subsequent chapters to number accordingly:

CHAPTER VII. COUNCIL ON MEDICAL DEFENSE.

Sec. 1. It shall be the duty of the members of the Council on Medical Defense, severally or collectively, to investigate and defend all damage suits against the State Medical Association of Texas; to investigate all claims of malpractice made against members; to take full charge of cases which, after investigation they will have decided to be proper cases for defense; to defend such cases to the end, and pay all costs of such defense. But they shall not pay, or obligate the Council on Medical Defense of the State Medical Association to pay, any judgment rendered against any member upon the final determination of any such case. They shall be empowered to contract with such agents or attorneys as they may deem necessary; but they shall always consult the defendant in employing attorneys.

Sec. 2. The assistance for defense, as herein provided, shall be available only to members of the State Medical Association of Texas who are in good standing. A member in arrears with annual dues shall not be entitled to Defense by the Council.

Respectfully submitted,

W. D. JONES, Chairman.
HOLMAN TAYLOR, Secretary.
W. A. KING.
E. F. COOKE.

Referred to the Reference Committee on Reports of Officers and Committees, except that portion referring to amendments to the constitution and by-laws, which was referred to the Reference Committee on Amendments to the Constitution and By-Laws.

Dr. J. W. Torbett of Marlin, read the report of the Committee on Defectives and Dependents, as follows:

REPORT OF THE COMMITTEE ON DEFECTIVES AND DEPENDENTS.

The proper handling of the mental defective at an early age, when most good can be done and most expense and harm to society prevented, is just now beginning to receive some of the consideration it has so justly deserved. It is considered advisable from an economic and educational, as well as humanitarian standpoint, to have proper State supervision and support for such cases.

In a full, yet conservative, report adopted by the New York Psychiatric Society and published in the *Medical Record* of April 17th, it is stated that a large percentage of the juvenile criminals and delinquents, prostitutes, adult criminals, paupers, vagrants, drug and alcohol addicts, venereal diseased, and even industrial accidents, that have caused so much expense to the State and so much danger to society, is caused by mental defectives or the feeble minded.

In this age of preventive medicine it is deemed wise and economical to seek causes and remove them, rather than wait for dire results to develop. Hence your Committee on Defectives and Dependents make the following recommendations and suggestions:

We commend the home for the indigent feeble minded, recently provided for by the Legislature, and trust the same may be established in some mild, salubrious, agricultural portion of the State, so that such inmates may be trained in the less skillful, industrial, agricultural or other pursuits, to become, in a measure, self-supporting.

We recommend that the present lunacy law for the commitment of insane persons, be left as it is or further simplified to the end that acute cases may be committed at once when most amenable to curative treatment and before they have become chronic and incurable, as in the past has often been the case.

The overcrowded condition of the asylums demand a further increase of buildings, and hence we recommend the equipment of psychopathic wards in our present buildings, for the immediate treatment of acute cases, and the further establishment of the cottage, agricultural classified system for more chronic cases, to the end that they may get fresh air, learn useful work and be in a greater measure self-supporting.

We recommend that a separate building be established for the idiotic and imbecile epileptics, who are now neither admitted to the asylum nor the epileptic colony.

We heartily commend the recent law which seeks to remove all eleemosynary institutions from the baneful influence of partisan politics and place them upon the high plane of efficiency and service.

We recommend the more general establishment of the county hospital in connection with the present so-called poor farm, by means of the main building and classified cottage system, for the care of the poor, the indigent sick, the infirm aged, the tuberculous, and the like, so that such patients may be educated and trained back to health and some useful occupation, at the same time being, in a great measure self-supporting.

Since some good authorities estimate at least 24 per cent of all criminals are mental or physical defectives, we would recommend a more efficient and scientific medical supervision of the inmates of our penitentiaries and the adoption of the educational and reward service system, as practiced in Colorado, Oregon and New York, so far as practicable in our mixed criminal population.

Since our present strenuous everyday and school life develops many neuropaths into mental and physical defectives, who may later become chronic incurables, criminals, paupers, drug and alcohol addicts, but who, if recognized in time and properly trained and educated, might be saved to lives of great usefulness and happiness, we suggest the adoption as soon as possible of a system of efficient medical inspection of schools.

We commend the Harrison anti-narcotic law and believe it will greatly redound to the ultimate benefit of humanity. We would suggest, however, that more definite means for the treatment of the poor addict in our county, city and State institutions, be adopted.

We commend the practice of sterlizing the incurable epileptic and mental defective, for economic as well as humanitarian reasons.

J. W. TORBETT, Chairman.

Referred to Reference Committee on Reports of Officers and Committees.

On motion, the House adjourned to 9 a. m., Wednesday, May 5.

GENERAL MEETING AND MEMORIAL EXERCISES.

The Association was called to order at 8 p. m., in the auditorium of the First Baptist church, by President Dr. Frank D. Boyd. Dr. M. E. Gilmore of Fort Worth, Chairman of the Committee on Memorial Exercises, was introduced by the President, and presided during the evening.

Rev. A. F. Carr of Fort Worth, delivered the invocation.

PRAYER BY DR. A. F. CARR.

God be merciful unto us and bless us and cause His faith to shine upon us. Let the people praise Thee, O God. Let all the people praise Thee; O, let the nations be glad and sing for joy, for Thou shalt judge the people rightcously and govern the nations upon earth. Let the people praise Thee, O God; let all the people praise Thee. Then shall the earth yield her increase, and God, even our own God, shall bless us. God shall bless us, and all the ends of the earth shall praise Him.

We thank Thee, our gracious Father, for the great army of workers who work for the relief of suffering and for the prolonging of human life. We thank Thee for the labor of those who, a year ago, were collected with this body and who have since been called to their everlasting reward. We thank Thee for all Thou hast enabled medical science to do for the welfare of man. We pray Thee, continue the blessing upon those who work in this study and this practice. We pray Thy blessing upon this meeting here at this time, and we pray Thee that Thou wilt lead them on through their study and knowledge and in their work of blessing unto all mankind, through Jesus Christ, our Lord, Amen.

Dr. Gilmore, after explaining the object of the meeting, read the list of deceased members for the year, May 1 to April 31, as follows:

LIST OF DECEASED MEMBERS, MAY 1, 1914, TO MAY 30, 1915.

Dr. C. F. Race, El Paso, died May 8th, 1914.
Dr. F. E. Daniel, Austin, died May 14, 1914.
Dr. W. M. Woodson, Temple, died June 14th, 1914.
Dr. J. W. Gallagher, Fort Worth, late of Graham, died June 20th, 1914.
Dr. E. S. Collier, Wills Point, died July 7th, 1914.
Dr. A. S. Watkins, Tehuacana, died July 21st, 1914.
Dr. E. A. Hendricks, Tuscola, died July 21st, 1914.
Dr. A. L. Montgomery, Dallas, late of Tyler, died August 20th, 1914.
Dr. J. F. Moore, Jr., Tyler, died August, 1914.
Dr. J. M. McCutchan, Waco, died October 9th, 1914.
Dr. P. E. Parker, Bay City, died October 16th, 1914.
Dr. Wilhelmina Von Gerber, Fort Worth, died September 19th, 1914.
Dr. C. D. Warren, Houston, died November 9th, 1914.
Dr. J. W. Carhart, San Antonio, died December 21st, 1914.
Dr. C. W. Truehart, San Antonio, died December 14th, 1914.
Dr. C. F. Yeager, Mineral Wells, died January 19th, 1915.
Dr. A. Keidel, Fredericksburg.
Dr. Robert J. Swaim, Pittsburg, Camp county.
Dr. A. B. Wayland, San Antonio.
Dr. B. S. Halliburton, Devine, Medina county.
Dr. T. J. Bell, Tyler, died January 6th, 1915.
Dr. M. C. Cornwell, Maypearl, Ellis county.
Dr. Z. F. Lillard, Houston.
Dr. A. M. Anderson, Throckmorton, died April 26th, 1915.
Dr. G. C. Abell, Texarkana.
Dr. W. T. Baird, El Paso.

RETIRED MEMBERS FORMERLY ACTIVE IN WORK OF ORGANIZED MEDICINE.

Dr. E. J. Beall, Fort Worth, died October 20th, 1914.
Dr. M. M. Woodward, San Angelo, died September 7th, 1914.
Dr. W. T. Richmond, El Paso, formerly of Edna, died November 27th, 1914.
Dr. C. Lipscomb, Denton.

Dr. C. M. Rosser of Dallas, was then introduced by the Chairman and delivered the memorial address, which is published in the Original Article department of the JOURNAL.

Dr. Fred J. Mayer of Opelousas, Louisiana, was introduced and delivered an address on the "Family Physician, in Memoriam," which will appear in the Original Article department of an early number of the JOURNAL.

Suitable music was rendered during the exercises, as per published program.

SECOND DAY---MAY 5

HOUSE OF DELEGATES.

MORNING SESSION.

The House of Delegates was called to order by the President, at 9:30 a. m.

Roll call developed a quorum and the regular order of business was taken up.

Dr. W. A. King of San Antonio, read the report of the Board of Councilors, as follows:

REPORT OF THE CHAIRMAN OF THE BOARD OF COUNCILORS.

The officers of the Association early in the year expressed some fear that we would show a loss in membership during the year, on account of the European war and the accompanying financial crisis which has, in a measure, overcome the country, and the further fact that there had been added to the dues $1.00 for Medical Defense. Instead of showing the loss anticipated, however, the reports of the councilors show the membership to be at this time 3,387, a gain of 176 over the membership of last year.

We feel particularly proud of this report, and the credit should be given to the councilors in the field and the secretaries of the component county societies.

I will not take the time to mention each of the councilors separately, and only wish to state to this House of Delegates that they have all been on the job, and they have not only increased the membership of the Association, but they have added to the spirit of loyalty, co-operation and brotherly love among our members. I believe that we today have one of the most harmonious State Medical Associations in the United States, and I wish to take this opportunity of expressing my personal thanks to the councilors and the secretaries for their loyal work this year.

Several new county societies have been organized and more are in process of formation, which will be completed in the next few months. I believe that the Association is now in a fair way of prosperity, which I anticipate will continue until practically every eligible physician in Texas will be enrolled in our membership list.

Several years ago the House of Delegates made a ruling that no county society would be allowed to exist where the membership dropped below five. From that date on each year county societies have been disbanded for depleted membership. No society has been disbanded for that reason during the past year.

We feel that this has been one of the most prosperous years of the Association's history, and we trust that each member of the House of Delegates will co-operate with our councilors and secretaries to the end that this prosperity may continue.

W. A. KING, Chairman,
Board of Councilors.

Referred to the Reference Committee on Reports of Officers and Committees.

Dr. Albert Woldert of Tyler, read the report of the Committee on Publicity, as follows:

REPORT OF COMMITTEE ON PUBLICITY.

Your Committee on Publicity desires to make the following report:

After organizing, our committee set about doing its work of obtaining, or trying to obtain, a synopsis or abstract of each paper to be read before the State Association, and consisting of 200 to 400 words. To this end we had published in the JOURNAL for April a notice to each and every contributor on the program to furnish us:

1—A synopsis of each paper, not too technical and containing not less than 200 nor more than 400 words;

2—Full title of each paper;

3—Name and address of author;

4—The section in which the paper is to be read should be clearly designated;

5—A synopsis should not be written as to appear a matter of personal advertisement;

6—In order that synopses may be copied and properly distributed authors are requested to send them to the secretary of the committee, Dr. T. J. Bennett, Austin, so that he will have them in his possession not later than April 15th.

In this notice to each contributor we specially requested that the papers *in full* should *not* be sent to us, but that each author should make up his own synopsis or abstract, since the author could do this quicker and better than the committee. Direct requests for a synopsis of each paper were made to every contributor, and notice given to have them in the hands of Dr. Bennett, the secretary of our committee, by April 15th.

Notwithstanding urgent and careful appeals were made to each contributor, it appears that a good deal of misunderstanding still exists on the part of members of the Association as to just what the Committee on Publicity desires. If each member or contributor will only remember the simple request made above there would be no confusion whatever about the matter. Few if any synopses were received by your committee at the time requested. However, up to May 1st, from some 123 authors we had received 59 synopses or, abstracts, which though much later than we desired, were sent out to the different newspapers of Texas, so that such newspapers could select and prepare for publication those synopses they deemed most important and interesting to the people at large. Other synopses were sent to us later, and these were also distributed to the newspapers. For the convenience of the Committee on Publicity, and to expedite the work of both the Publicity Committee, as well as the newspapers of the State, authors should send in their synopses on time, for otherwise if too late no note whatever might be made of them by the newspapers, on account of lack of time in printing them. We hope that the work of your committee will be of interest to the people generally, and be of value to this Association.

Respectfully submitted,

ALBERT WOLDERT, Chairman.

T. J. BENNETT, Secretary.

Referred to the Reference Committee on Reports of Officers and Committees.

Dr. Albert Woldert of Tyler, read the report of the Committee on School Text-Books, as follows:

REPORT OF CHAIRMAN OF COMMITTEE ON REVISION OF SCHOOL TEXT-BOOKS.

As Chairman of the Committee on Revision of School Text-Books at the Houston meeting I made a report to the House of Delegates of the work done by our committee in regard to having books on physiology and hygiene taught in the schools of Texas to be revised every two or three years, and it will be recalled that was our recommendation made to this House of Delegates last year.

As stated in our former report after having made a thorough investigation of the books, we found certain publications on physiology and hygiene taught in some of our schools which needed correction and additions, while in others one of the books being recommended for study bears the date of 1906, and another 1908.

The schools coming within the scope of our investigation were as follows: University of Texas at Austin; Medical Department, University of Texas at Galveston; A. and M. College at College Station; College of Industrial Arts at Denton, and the public schools of Texas, including the State Normal schools.

In taking up this matter an enormous amount of work in the way of correspondence has been carried on for over a year, in which investigation your committee determined the list of books on physiology and hygiene being taught in our schools, and also the date of last revision of said books. After obtaining this information we began corresponding with the publishers and authors, where it was found that their books had not been revised during the past two or three years. In this correspondence we pointed out to the authors and publishers the necessity of printing later revised editions of certain books bearing a date of 1906 and 1908, and bringing them down to date, and we also suggested to parties concerned the importance of incorporating in such books, where it was possible, a few remarks bearing especially on the diseases (and their prevention) prevalent here in Texas.

The presidents of certain schools in Texas, using books on physiology bearing a date of 1906 and 1908 of last revision (according to our information) were appealed to in order to get them to write the publishers of these books, asking such publishers to print new revised editions of their books. The presidents of these schools agreed to co-operate with your committee, but whether they have written and insisted on issuing a new revised edition of such books the chairman of your committee has not been advised. The books on physiology and hygiene now being taught in the public schools of this State, while being up to date, and being of a high order of merit, still contained some incorrections, and needed additions. The chairman of your committee reviewed these two books used in the public schools, and sent to the authors about thirteen pages of corrections and additions, and the authors readily agreed to co-operate with your committee, and I have been informed they are now revising these books on physiology and hygiene, being taught in the public schools.

Since the work of the Committee on School Text-Books began, we wish to say that one large institution in this State has already discarded one of its books; and Professor F. M. Bralley, of Denton, has written your chairman a letter, which in part says: "I have requested in compliance with a letter from you that the publishers of——physiology have the text thoroughly revised and brought up to date according to the latest achievements of science. If this is not done the college will promptly discontinue the use of their text." This is the kind of co-operation your committee desires.

This matter of the proper revision of the school text-books on physiology and hygiene has been laid before the Governor of this State, before the State Text-Book Board, and also before Professor W. F. Doughty, Superintendent of the Department of Education of Texas, and under date of February 25, 1915, Professor Doughty says: "Replying to your letter of February 23rd, permit me to advise that

your communication will be laid before the Text-Book Revision Committee at its next meeting, which will be early in March."

As physicians, your committee deems it important for the schools of Texas to teach from books on physiology and hygiene which have been recently revised, because in our opinion a person buying such a book is entitled to receive the latest and best knowledge concerning these subjects. In our opinion, books on these subjects which bear a date as remote as 1905 or 1908, should either be stamped with a later date of revision, or else discarded as a text-book from our schools.

The work remaining, and yet unfinished, is for a new Committee on Revision of School Text-Books to take this matter of revising certain books up with the presidents of certain of our schools in Texas, and having them insist upon the publishers or authors of such books that new revised editions be issued, or if not, that such books will be discarded at the fall session of our schools. This applying to those books which bear a date of 1906, 1908 or 1909.

To the end that this result may be obtained, we therefore recommend that a new Committee on Revision of School Text-Books be appointed immediately.

Respectfully submitted,
ALBERT WOLDERT, Chairman.
C. C. JONES.
J. M. FRAZIER.
W. B. HALLEY.
C. C. GIDNEY.

Referred to the Reference Committee on Scientific Work.

Dr. L. B. Bibb of Austin, read the report of the Committee on Medical Education, as follows:

(NOTE—This report was never returned to the State Secretary, hence cannot be included in the minutes. There is no mention of the report in the Reference Committee report.)

Referred to the Reference Committee on Scientific Work.

Dr. C. P. Brewer of Fort Worth, Chairman of the Committee on Scientific Exhibits, made the following report:

REPORT OF COMMITTEE ON SCIENTIFIC EXHIBITS.

Pursuant to instructions from President Boyd, your committee solicited scientific exhibits from various sources, and the following responded with contributions in anatomy, physiology, pathology, diagnostics and research: The medical departments of Baylor University and Texas Christian University, the Texas Roentgen Ray Association, the United States Bureau of Animal Industry, and Dr. D. Meredith of Wichita Falls. There were fifty-four pathological specimens exhibited by the Fort Worth Station of the Bureau of Animal Industry, through the Section on State Medicine and Public Hygiene. This exhibit was accompanied by a very well gotten up and valuable catalogue, descriptive, diagnostic and instructive. The specimens were efficiently demonstrated by Dr. Lundell and his able assistants.

About forty specimens from the Medical Department of Texas Christian University were demonstrated by Dr. T. L. Goodman, Professor of Pathology. Anatomical dissections were also furnished by Prof. Frank Sanders of the same institution.

About twenty specimens were furnished by the Medical Department of Baylor University, and for these we are indebted to Prof. W. H. Moursund.

Dr. D. Meredith of Wichita Falls, was kind enough to exhibit two monkeys, one of which he had been successful in inoculating with what he believes to be the infective organism of pellagra; the other was a control. Dr. Meredith also exhibited antigens, etc., pertaining to his researches in pellagra.

Several members of the Texas Roentgen Ray Society contributed in all about 75 radiographs, which were exhibited in illuminating boxes of suitable construction, by Dr. George D. Bond and Mr. Tom D. Bond. It is to be regretted that others than members of the society named could not have been induced to furnish exhibits of this character, as there are doubtless many very interesting and perhaps rare radiographs stored away by those who do not make this work a specialty.

We urge that the matter of scientific exhibits for our annual sessions receive your earnest consideration, and we heartily recommend that the project be made a permanent feature of the Association.

Respectfully,
C. P. BREWER, Chairman.

Referred to Reference Committee on Scientific Work.

Dr. L. B. Bibb of Austin, Chairman of the Committee on Study of Cottonseed Meal as a Food for Humans, reported as follows:

REPORT OF COMMITTEE ON STUDY OF COTTONSEED MEAL AS A FOOD FOR HUMANS.

Your committee appointed to investigate the food value of cottonseed meal for human beings, was empowered to seek the co-operation of other State agencies. Accordingly, overtures were made to the following officials, or their representatives: The State Health Officer, the State Dairy and Food Commissioner, the State University and the Texas Public Health Association. All of these agencies responded and a representative of each met in a conference.

It was decided to prosecute the work vigorously, and ways and means were discussed. Miss Anna E. Richardson of the Department of Domestic Economy, in the University of Texas, and Mr. E. A. Golaz, chemist for the Dairy and Food Commissioner, were already interested, and had done good work already. The university was generous, and on the recommendation of Miss Richardson, arranged for a nutrition chemist to devote her entire time to the work. The Public Health Association donated $100 to help pay for apparatus, and the Cottonseed Crushers' Association, acting through Colonel Allison of Dallas, pledged some financial aid. From this source $100 has already been contributed to date (May 4th). Miss Anna E. Richardson was elected secretary of our general committee, and her report follows:

"It is most fitting that the investigation of cottonseed meal as a human food should be undertaken in Texas at this time. The question of toxicity of cottonseed meal still seems to be an open one, and our work, which is being done at the University of Texas, is intended to ascertain the nutritive value of cottonseed meal and at the same time to discover whether it is toxic to the rate, and if toxic, why.

"The white rat has been chosen as the most favorable animal to use in our experiments, because, of all animals, its natural diet is most nearly like that of man—that is, it is omniverous. Its digestive system is adapted to a diet of high protein content. This is an important point, as it is not reasonable in a nutritional experiment with food rich in protein, to use an animal unaccustomed to large amounts of protein in its food. More work has been done upon the life history of the rat than upon any other small animal suitable to experimental needs. Donaldson has compared the life of the white rat with that of man, while Osborne and Mendel for the last five years have used the rat in nutritional ex-

periments with the isolated proteins. All of this material gives a substantial foundation upon which to work.

"Our several control animals are fed on a mixture of dessicated milk, lard, and starch. This ideal diet has been worked out and adopted by Osborne and Mendel, with the best results. With the composition of this food in fat, carbohydrate and protein as a standard, we have outlined a series of diets with cottonseed meal furnishing part or all of the protein, which we believe will give us definite information concerning the nutritive value and possible toxicity of cottonseed meal.

"Three diets were started a month ago. The accompanying charts, plotted by age and weight, will indicate the rate of growth.

"*Charts* 25 and 27* are of two control animals on milk diet. *Charts 26 and 29* are of two animals on a diet of lard, starch and cottonseed meal furnishing all of the protein. *Charts 33 and 35* are of two animals on a diet in which cottonseed meal furnishes 16.5% protein and wheat flour 4%.

"We have now started to feed rabbits cottonseed meal, with the idea of following up the work of other investigators with these animals.

"At the same time we have been conducting metabolism experiments to determine the coefficient of digestibility, nutritive value and possible significance of the ash constituents of cottonseed meal."

In conclusion, it may be stated that the work is proceeding with regularity, and bids fair to give very valuable evidence concerning the problem at hands. Probably within the year results may be obtained which are of sufficient value and reliability to give to the public, although in any research the unexpected may bob up at any time, and hence prognostication is not wise.

Respectfully submitted,

L. B. Bibb, Chairman.

Referred to Reference Committee on Scientific Work.

Dr. C. E. Cantrell of Greenville, Texas Representative of the National Council on Medical Education, read the following report:

Report of Texas Representative of the National Council on Medical Education.

Your Councilor on Medical Education desires to report as follows:

First, allow me to say that it would be impossible for me to make a satisfactory report on Medical Education without taking into consideration the other councils that met at the same time in Chicago, at the Congress Hotel, where a three days' program of the best educational work that it has ever been my privilege to enjoy, was carried on. The Council on Public Education and Legislation, the Council on Medical Education, the American Association of Medical Colleges, the Council on Classification of Hospitals in America and the State Boards of Health, all met during these three days, and I find that it will be impossible for me to make a rational report to this body without taking some notice of the work done by all of these agencies.

In the first place, allow me to say that the Council on Education of the Public and Legislation, has performed some of the best work this year that has ever been done for the Association. The bill prepared to be presented to State Legislatures and the educational work done by more than a hundred lecturers for this council, is far in advance of what I expected for the first three years of the existence of this council. If our government is to profit by the work done by this council we must put in effect at least some of the teaching that is now being carried to the people. It seems to me that the Boards of Health of the States should have representatives before this council, for the reason that they should know first of all the health regulations that the people are being prepared to accept. Our people will not be governed by laws they do not understand. The power to regulate comes from the people, and the people must be educated so they can see the necessity and usfulness of such regulations as our Boards of Health would like to put into effect.

This House of Delegates is no doubt familiar with the work that has been done by the Council on Medical Education, headed by Dr. Bevan of Chicago. Without reviewing at too great length the work that has been done by this council, allow me to say that America has risen far above the estimate that was placed on medical education by the investigators of ten years ago. You doubtless are all familiar with the report that was made by Flexner, representing the Carnegie Foundation. By consulting that report, it can be found that America had the poorest system of medical education of any country of its class in the whole world. Today we have the best medical colleges known to civilized man. Besides, we have at least forty State universities that are now doing creditable work in medical education.

In the beginning of this work, the council found that it would be necessary to do two things; first, reduce the number of colleges, which was at that time one hundred and sixty-six in America, to such a number as could be supported by the demand for medical education. This work has been steadily pushed forward until now we have ninety-six colleges or less, with a prospect of further reduction in number. The other object paramount in the minds of the council in the early days of its work was to increase the entrance requirement for students to such a point as would best enable the medical student to grasp the work in hand. This has been carried forward to such an extent that the professors themselves of the best universities, by comparison, have found it necessary to call a halt.

The council has been busy about many other things connected with the education of doctors. They believe that it is necessary to add a fifth year to the time required to educate a student in medicine, to be called the hospital or interne year. While but one examining board has required this hospital year, to wit, Pennsylvania, I am sure the boards in other States will make this requirement in the near future, and we had just as well prepare for it in Texas. Strange as it may seem, this requirement in Pennsylvania has not been made by the universities and colleges, but by the medical examining board. The requirement there seems to have been the work of practically one man. Dr. Baldy of Philadelphia, who seems to be the secretary of the Board of Examiners, had the board to pass a requirement for this hospital year of service before the license could be granted. Without any further law than this, the requirement was made, and no student has been licensed in Pennsylvania for the last two years who has not had this interne year in a hospital. Seeing that this work was necessary, and determined to help in all ways possible, the American Medical Association created a council known as the "Council on Hospitals in America," for the purpose of classifying hospitals thought fit for interne work of medical students. A report of this work, I am sure, you will have from Dr. Carter, who is the Chairman of the Texas committee.

There is a decided tendency among those who have contributed largely to the establishment and endowment of universities, to direct how the money

*Note:—These charts will not be published until conclusion of the study, according to request of the committee.

shall be expended. I think I have noticed this tendency more this year than in previous years. Contributions have been made to endow certain chairs, and especially during the last year have they seen fit to take charge of endowment of clinical chairs of medicine, about which there has arisen considerable discussion. The universities that had paid clinical teachers sought to find difference with Dr. Bevan and his council on this subject, and the council refused to differ from them, except in certain methods they had pursued in naming those to fill the positions and the salaries paid and the effort made to control all of their time and dictate that they should collect no fees from any of their patients, all of their work being for the university. Some of the universities, with clinical paid teachers of this class, have collected large sums of money from private patients, which have been used for the advancement of teaching in the particular branch of medicine producing the return. One example was pointed out where the professor received something over $800 per month for his services to the university, and the university receiving $2,500 per month for the pay work he did. This, in the minds of some, has not been thought fair to other clinical authorities living in the same community as the university. Inasmuch as this question was raised by the council, there was great preparation made to prove by the experience of colleges in Europe that the committee was wrong in opposing paid clinical teachers. Dr. Bevan very easily disarmed his opponents by refusing to differ from them, except as to the methods used in the distribution of the funds. Just how this question will be settled remains to be seen; however, there are good arguments for paid clinical teachers, as well as many arguments against confining the teaching entirely to paid teachers.

There is a decided tendency among the universities to do the graduate teaching in medicine, a work that heretofore had been left to post-graduate schools. The post-graduate schools of America have been somewhat under investigation, and it has been found that such institutions have not measured up to the universities. President Pritchett, in a masterly presentation of the efforts being made by philanthropists and the donors of large sums of money for the purpose of raising the standards of medical education, made it clear that any college doing acceptable work could find money to pay clinical teachers, as well as other teachers, when they had proven themselves able to properly use the money. He was very bold in the assertion that any organization asking for help could always get the money if they showed proper organization; but these funds cannot be drawn on by institutions that are not properly organized. It has not been the tendency of the Rockefeller funds to build institutions; the effort has been to help institutions that are properly prepared to do the teaching; giving money to institutions that are not well organized has not met favor with Mr. Rockefeller, and one has but to read his last article in the *Saturday Evening Post* of a month or six weeks ago to confirm this opinion. President Pritchett found fault with the present classification of medical colleges in America.

The council has dropped the A-plus grade and put all of the institutions that are thought to be doing creditable work in Class A. It is pointed out that there are many institutions in Class A that differ widely in ability to teach from other institutions. The council had a very happy way of explaining this, saying that the classification should be considered as a ladder with many rungs to it, and that all institutions now prepared to do creditable work are in this class; and as one climbs the ladder institutions will be found elevated in proportion to the rungs.

The Association of Medical Colleges has found that under this new classification the standing of some colleges have had to be reduced to "B" that had heretofore been in "A." While this reduction has been made, no members have been dropped; those members reduced to "B" are retained in the hope that they will in a very short time meet the requirements of the classification as "A" grade institutions. The American Association of Medical Colleges heretofore has had no members in the "B" class. I do not believe they will admit new members in this class, and that it will, in a very short time, remove from the list all members that refuse to advance to the "A" classification. Every American physician should feel proud of the advancement made in American medicine, and I shall not be surprised, when the reports are made a decade hence, to find that American medicine has come up from the low classification made by Flexner to the best system of medical education in the world. This is apparent to me for two reasons: First, because of the sudden awakening of interest in better preparation, and, second, because of the misfortunes of war in the other nations of our class.

In the closing paragraph of this report, allow me to say that the most hopeful thing of the past year is the tendency of the universities to do graduate teaching. I say this, because it is perfectly apparent to the inquiring mind that the physicians of America must be re-educated, if they are not willing to be displaced by those who have been recently educated.

Respectfully submitted,

C. E. Cantrell,

Texas Representative of the National Council on Medical Education.

Referred to Reference Committee on Scientific Work.

The President introduced by Dr. W. L. Heizer of Kentucky, State Registrar of Vital Statistics and Fraternal Delegate from Kentucky.

Address (in part) of Dr. W. L. Heizer.

It is rarely that I have the opportunity within one week of appearing before such great representative bodies of the medical profession as the State Medical Associations of Texas and Arkansas. I have just come from the meeting of the Arkansas Association. I am operating under the auspices of the State Board of Health of Kentucky, which is taking an active interest in the investigation of nostrums. in Kentucky the State Board of Health is the active executive arm of the Kentucky State Medical Association, and we have an organization with which we are able to accomplish a great deal of good. In our fight against nostrums we are opposed by such allied proprietary interests as Wine of Cardui, Duffy's Malt Whiskey, Hall's Catarrh cure, Lydia Pinkham's Compound and so on, *ad libitum.*

I want to get from members of this Association the following information: In how many districts is Wine of Cardui commonly used? Do you know of any cases in your territory where it has been used in excess as a beverage? Do you know of any cases of women who have needed medical or surgical treatment who have taken Wine of Cardui for relief and failed to secure it until given the proper medical and surgical relief? Can you report to me any cases where it has been used for a certain definite pathological condition without success until cured by legitimate medicine or surgery? Do you know of any cases where it has been used in excessive doses for a prolonged period of time? Do you know of any cases of women treated for delirium tremens

following the use of Wine of Cardui or any other nostrum? Have you had to advise any woman to discontinue the use of this or any other nostrum of like nature, because, in your judgment as a physician, they were in danger of contracting the alcohol habit? I hope while I am here you will be good enough to talk with other members and give me the benefit of your information.

The President introduced Dr. Seale Harris of Mobile, Alabama, Secretary of the Southern Medical Association, who spoke in part as follows:

ADDRESS (IN PART) BY DR. SEALE HARRIS.

I regard it as a very great privilege and a pleasure, to be present at this meeting of the House of Delegates of the great Association you represent. The Texas State Medical Association has the reputation of being one of the very best, if not the best, State association in this country. (Applause.) I hope while here to get some pointers on how you conduct your affairs and take them back to Alabama, where we are trying to reorganize our State Association. We realize that your Secretary is one of the moving forces in your Association, and also of your JOURNAL, one of the very best State medical journals published.

The Southern Medical Association, which I represent, is not sectional, from the narrow viewpoint of prejudice, and while we are loyal to the American Medical Association we believe we have as good material in the Southern Medical Association as can be had anywhere, and we feel that we can build in our Southland an organization second to none in the matter of scientific and ethical medicine.

Dr. M. M. Carrick of Dallas, Texas member of the National Legislative Council, read his report, as follows:

REPORT OF THE TEXAS MEMBER OF THE NATIONAL LEGISLATIVE COUNCIL.

I desire to express to the press, the county medical societies of the State, and above all to the thousands of physicians whose names I do not know, but whose support has been invaluable, my heartfelt thanks for their aid in advancing my work and the considerate forbearance shown for my mistakes.

The necessity for my absence from the State during the past few months has prevented much activity on my part, but I have endeavored to reach the citizens of Texas through the medium of the press, and no one knows better than I do how much that should have been done remains unaccomplished on that account, how much on account of my failure to do the most that might have been done with the opportunities given me by the well-meaning members of our profession.

I am sincerely appreciative of the great opportunity given me, and profoundly grateful for the loyal support of the officers and members of the Association who have made possible the doing of whatever has been done.

I never hear the name of a physician in Texas without just a little tug at my heart strings.

MANTON M. CARRICK,
Texas Member of the National Legislative Council.

Referred to the Reference Committee on Reports of Officers and Committees.

The Secretary read a set of resolutions received from the La Salle-Frio County Medical Society, relating to the matter of compulsory vaccination against smallpox, which was referred to the Reference Committee on Resolutions.

The Secretary read a communication from the Section on State Medicine and Public Hygiene, relating to the penalties for violation of the vital statistics law, and suggesting that they be reduced in the interest of the improvement of the law. Referred to the Reference Committee on Memorials and Rsolutions.

The Secretary read a telegram from the Arkansas State Medical Association, announcing the appointment of Dr. R. A. Hilton as Fraternal Delegate, and it was moved and carried that the Secretary be instructed to answer in an appropriate manner.

The Secretary read a communication from the Master Plumbers' Association of Texas, requesting a hearing in the interest of one of their legislative measures, and stated to the House that the Legislative Committee of the State Association had already approved the particular measure referred to, at least in essence.

Upon motion, duly seconded, the communication was referred to the Committee on Legislation, and the Secretary directed to so notify the authors of the telegram.

The Secretary read the report of the Committee on Memorial Exercises, as follows:

REPORT OF THE COMMITTEE ON MEMORIAL EXERCISES.

Your Committee on Memorial Exercises begs to report that the memorial services were held at the First Baptist church, Tuesday evening, May 4, as scheduled. The program, somewhat elaborated, was carried out as published, in the presence of a large and appreciative audience. A copy of the program, together with the list of deceased members commemorated, is herewith attached.

Respectfully submitted,
M. E. GILMORE, Chairman.

Referred to Reference Committee on Reports of Officers and Committees.

On motion, the House adjourned until 5 p. m. to consider at that time the annual report of the Board of Trustees and the report of the Reference Committee on Revision of the Constitution and By-Laws.

GENERAL MEETING AND JOINT MEETING OF SCIENTIFIC SECTIONS.

The scientific program was carried out as published. No business was transacted.

HOUSE OF DELEGATES.

EVENING SESSION.

Dr. J. J. Hanna of Quanah, presented the report of the Reference Committee on Credentials, and a quorum being present, the House was called to order at 5 p. m., by President Dr. Boyd.

Dr. John T. Moore of Houston, chairman, read the report of the Board of Trustees, as follows:

REPORT OF BOARD OF TRUSTEES.

Early in the year a loan of one thousand dollars was made to the Council for Medical Defense, so that its work could be begun without delay. This money was returned to the regular fund on February 1, 1915. The council's funds are now sufficient to carry on their normal activities. In view of the additional work required by Medical Defense, it was necessary at the outset to rearrange the salaries of the office force. This has been done satisfactorily by the council, at a very small increase in the total expense of the office. It was necessary for the Council of Medical Defense to engage an attorney to look after the defense of our members. This attorney, as I understand, also renders such legal help to the Board of Trustees as may be needed, at little or no additional expense to the Association.

During the past year it has been necessary to buy some additional furniture for the offices of the Association; all of this furniture is of the best quality, of high-grade steel construction. The Secretary, by the purchase of a dictaphone, has greatly multiplied himself in turning out work.

The Board of Trustees has arranged with the American Medical Association for joint representatives to tour the State in the interest of both organizations. Much good has resulted from the visits of these representatives, in adjusting many difficulties in different sections of the State, and in bringing about a thorough understanding as to what is going on in the State Association and also in the American Medical Association. We think now this was quite a good move, although at the beginning we hesitated as to the wisdom of the project.

The Board of Trustees has declined to appropriate funds of the Association for the State Public Health exhibit car.

We also took the position that it was not a part of our function as an organization, to test our lunacy law, recently held unconstitutional by the lower courts. Since this matter was laid before us, a case has been appealed by the regular local authorities, we understand, in Harris county, and there is a case now on appeal to the higher courts, to settle the question as to whether or not the new law relating to the commitment of the insane is constitutional.

We would like to commend the efficiency of our Secretary and his very competent office force, who, by their loyalty and faithfulness, have enabled us to make a very creditable showing in spite of war times. This is well set forth in the Auditor's report, which is hereto attached.

We again call attention to the necessity of our members rendering assistance in the matter of securing advertisements, by simply writing advertisers that they "saw it in the TEXAS STATE JOURNAL OF MEDICINE. Advertisers judge the value of their placed advertisements by the inquiries that come to them as a result, and if we will take occasion every now and then to write these advertisers about seeing it in the JOURNAL, the advertising will come easier. Our Secretary-Editor tells us that if this were done frequently he could materially enlarge the JOURNAL and yet make more money out of it.

The Auditor's report follows:

REPORT OF THE AUDITOR.

Fort Worth, Texas, May 1, 1915.

In presenting the accompanying Exhibits of the revenue and expenditures pertaining to the four funds into which the money in the treasury of the Association is divided, the pleasure is afforded me of bringing to your attention the increase of $4,272.30 in the balance in bank at the close of the past fiscal year over the amount on deposit on the same date of the previous year.

On April 30, 1915, the balance on deposit with the First National Bank, Greenville, Texas, was $18,151.72, which agrees with the Treasurer's report.

During the year an average daily balance of $11,514.00 was carried with the bank on which $690.84 in interest was collected.

As the balance of $3,024.17 to the credit of the Association Fund at the beginning of the past fiscal year was greater than the total expenditures for that fund for the entire year, and as the expenditures for the present year may be safely estimated at about the same amount, a transfer of a sum sufficient to raise the Unappropriated Fund to $10,000.00 could be made from the Association Fund without inconvenience.

As shown by Exhibit B the total revenue of the Journal during the past fiscal year was $9,285.34, an increase of $1,013.13 over that of the previous fiscal year, and while the cost of publication for the same time was relatively larger for the latter year, the excess of cost over the revenue for the last year was only $87.44. A comparison of the net results for the two years showing a gain of $475.57 for the year just closed.

The capable manner in which the accounts of the Association are kept is deserving of recognition, and for the assistance cheerfully rendered me in my work it is but proper that I express my acknowledgments.

Assuming that the surety bonds taken by the Association are to your satisfaction, I am,

Yours very respectfully,
D. H. KERNAGHAN,
Auditor.

EXHIBIT A

ASSOCIATION FUND.

From April 30, 1914, to April 30, 1915.

Receipts.

Balance to the credit of this Fund April 30, 1914	$ 3,024.17
Received for Membership Dues	3,818.00
Total Receipts	$ 6,842.17
Less Disbursements	2,761.57
Balance on hand April 30, 1915	$ 4,080.60

Disbursements.

Secretary's and Assistants' Expenses	$ 86.00	
Clerical Work—Reporting Scientific Sections	75.00	
Reportorial Work — House of Delegates	111.00	
Badges	172.00	
Programs	40.00	
Telegrams	19.31	$ 504.91
Committee on Legislation	$ 202.02	
Committee on Publicity	32.10	
Committee on Insurance	7.50	241.62
State Councilors' Expenses	$ 490.03	
State Councilors' Stationery	53.50	543.53
Secretary's Expenses to meeting of American Medical Association	$ 125.00	
Representative to Cenference on Medical Education—Expenses	75.00	200.00
Reprinting Constitution and By-Laws	$ 16.23	
Indemnity Bond	45.00	
Taxes and Auditor	18.00	
Office Furniture	251.88	331.20
Secretary's Office Expenses:		
Office Rent—12 Months	$ 108.00	
Postage	100.00	
Stationery	75.07	
Telegrams and Telephone	40.04	
Expressage	13.90	
Miscellaneous	3.30	340.31
Salaries:		
Secretary	$ 300.00	
Bookkeeper	300.00	600.00
Total Disbursements		$ 2,761.57

EXHIBIT B

JOURNAL FUND.

From April 30, 1914, to April 30, 1915.

Receipts.

Balance to the Credit of this Fund April 30, 1914		$ 1,902.10
For Subscriptions	$ 3,818.00	
For Subscriptions — Non-Member-membership	19.50	
For Advertisements	5,416.29	
For Sales of Journals	21.55	
For Engraving	2.00	
For Furniture	8.00	9,285.34

Disbursements.

Printing Journal		$ 4,638.60	
Salaries:			
Editor—12 Months	$ 2,299.92		
Bookkeeper	660.00		
Stenographers	744.00	3,703.92	
Advertising Solicitors		19.50	
Engraving		138.65	
Postage and Expressage		285.52	
Delivering Journals		14.85	
Auditor		33.00	
Copyright Registration		12.00	
Telegrams and Telephone		53.88	
Binding Journals		36.00	
Stationery		50.80	
Office Rent—12 Months		192.00	
Miscellaneous Expenses		7.56	
Office Furniture		186.50	$ 9,372.78
Balance on hand April 30, 1915			$ 1,814.66

EXHIBIT C

MEDICAL DEFENSE FUND.

From April 30, 1914, to April 30, 1915.

Receipts.

For Subscriptions by Members		$ 3,213.00	
For Interest on Daily Balance at 6%		17.44	$ 3,230.44

Disbursements.

Traveling Expenses of Committee		$ 137.10	
Salaries:			
Secretary	$ 46.70		
Bookkeeper	27.50		
Stenographer	27.50	101.70	
Stationery		25.25	
Postage		21.00	
Legal Expense		219.75	
Furniture and Fixtures		60.00	564.80
Balance on hand April 30, 1915			$ 2,665.64

EXHIBIT D

RECAPITULATION.

From April 30, 1914, to April 30, 1915.

Receipts.

Balance with Treasurer April 30, 1914		$13,772.23	
Balance with Secretary April 30, 1914		107.19	$13,879.42
Total Receipts Association Fund		$ 3,818.00	
Total Receipts Journal Fund		9,285.34	
Total Receipts Medical Defense Fund		3,213.00	
Interest Collected to May 1, 1915	$ 690.84		
Less Exchange Paid	35.73	655.11	16,971.45
			$30.850.87

Disbursements.

Total Payments Association Fund		$ 2,761.57	
Total Payments Journal Fund		9,372.78	
Total Payments Medical Defense Fund		564.80	$12,699.15
Balance on hand April 30, 1915			$18,151.72
In hands of Treasurer		$18,095.18	
In hands of Secretary		56.54	$18,151.72
In Unappropriated Fund		$ 9,590.82	
In Association Fund		4,080.60	
In Journal Fund		1,814.66	
In Medical Defense Fund		2,665.64	$18,151.72

CERTIFICATE.

Fort Worth, Texas, May 1, 1915.

On the completion of the annual audit of the account books of the Association, the foregoing Exhibits are presented as representing the financial condition of the Association as of April 30, 1915. All receipts have been accounted for and all expenditures were evidenced by satisfactory vouchers.

I certify that the said Exhibits are in agreement with the books, and I believe the same to be correct.

D. H. KERNAGHAN,
Auditor.

Respectfully submitted,

JNO. T. MOORE, Chairman.
W. R. THOMPSON, Secretary.
J. S. TURNER.
R. R. WHITE.

Referred to the Reference Committee on Finance.

Dr. John S. Turner of Dallas, Chairman of the Reference Committee on Amendments to the Constitution and By-Laws, read the following report:

FIRST REPORT OF THE REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS.

Your committee has held two meetings and has gone over the matters referred to it as thoroughly as could be expected under the circumstances.

The first amendment we suggest—and in order to be fair and that you may get it well fixed in your mind, we think we ought to call your attention to the fact that our recommendations do not comport entirely with the recommendations of the original Committee on Amendments to the Constitution and By-Laws. We will direct your attention to these differences as we go along.

In the proposed revision, page 4, we recommend that Article IV, of the constitution, be amended to read:

"Sec. 1. The House of Delegates shall be the legislative body of the Association, and shall consist of (1) Delegates elected or appointed in accordance with this constitution and by-laws to represent their component county societies, (2) the Councilors, (3) Trustees, (4) Council of Medical Defense, (5) Council on Legislation and Public Instruction, and (6) *ex-officio*, the President, Secretary and Treasurer."

Further, that Section 2 be eliminated.

Proposed revision, page 12, by-laws, Chapter V, Sec. 7, we recommend be amended to read:

"Chapter VI, BOARD OF TRUSTEES, Sec. 1."

Proposed revision, page 13, Chapter VI, BOARD OF COUNCILORS, to read: "Chapter VII.," etc.

Proposed revision, page 15, at the close of new Chapter VII, headed "Board of Councilors," we recommend the insertion of the chapter on Council on Medical Defense, as follows:

"Chapter VIII. COUNCIL ON MEDICAL DEFENSE."

Sec. 1. It shall be the duty of the members of the Council on Medical Defense severally or collectively, to investigate and defend all damage suits against the State Medical Association of Texas, to investigate all claims of malpractice made against members; to take full charge of cases, which, after investigation they will have decided to be proper cases for defense; and to defend such cases to the end, pay all costs of such defense; but they shall not pay, or obligate the Council on Medical Defense or the State Medical Association to pay, any judgment rendered against any member upon the final determination of any such case. They shall be empowered to contract with such agents or attorneys as they may deem necessary, but shall always consult the defendant in employing attorneys.

Sec. 2. The assistance for defense, as herein provided, shall be available only to members of the Texas State Medical Association in good standing. A member in arrears with annual dues shall not be entitled to Defense by the council.

Sec. 3. Any member or members of the State Medical Association of Texas threatened with suit for malpractice, who desires the assistance of the Council on Medical Defense, shall immediately after he becomes aware of the threat to sue notify the secretary of the Council on Medical Defense, or any member thereof, or the general attorney of the Association in the instance there is not time to communicate with a member of the council. The secretary of the Council on Medical Defense, or any member thereof, or the general attorney, when so notified, shall proceed immediately to investigate the circumstances reported, in the manner and procedure hereafter to be set out by the Council on Medical Defense, securing for the consideration of the said council full data and statement of facts and circumstances surrounding the filing of the suit or suits for its consideration and permanent files. The member sued or threatened with suit and under investigation by the Council on Medical Defense, shall be consulted and have the full confidence of the council in all transactions connected with the investigation in question. The Council on Medical Defense shall have the authority to require of a county society or the president thereof the appointment of a committee of investigation in any such case, the said committee so appointed to report to

the Council on Medical Defense and not to the society from which it is appointed, except the Council on Medical Defense shall so direct.

Sec. 4. The Council on Medical Defense may also, at its discretion, appropriate funds to prosecute illegal practitioners and enforce the Medical Practice Act of this State.

Proposed revision, page 15, Chapter VII, COMMITTEES, we recommend be amended to read:

"Chapter IX. COMMITTEES," and that Sec. 3 be amended as follows:

"Sec. 3. The following (a) Standing Committees shall be appointed by the President as soon as possible following his induction in office:

(1) Committee on Scientific Work.
(2) Committee on Collection and Preservation of Records.
(3) Committee on Memorial Exercises.
(4) Committee on Transportation.
(6) Committee on Arrangements for the Annual Session."

Proposed revision, page 16, at close of Sec. 5, new Chapter IX, amend to read:

"Sec. 6. The Council on Legislation and Public Instruction shall consist of three members and the President and Secretary as *ex-officio* members. Members shall be appointed for three years, one to be named by each retiring president; but in the first instance three shall be named and they shall draw lots for terms of office of one, two and three years, respectively.

"Each of the subsequent sections to be renumbered one number in advance to allow for the above new section, and that new Section 8 be amended as follows:

"Sec. 8. The Council on Legislation and Public Instruction, under the direction of the House of Delegates, shall represent the Association in securing legislation in the interest (the balance of the section to remain as before)."

Proposed revision, page 18, CHAPTER VIII, SCIENTIFIC SECTIONS, to read:

"CHAPTER X. SCIENTIFIC SECTIONS."

Proposed revision, page 19, CHAPTER IX, ASSESSMENTS AND EXPENDITURES."

Sec. 1. An assessment of three dollars per capita on the membership of component county societies is hereby made the annual dues of the Association. Of this amount, one dollar shall be the subscription fee to the TEXAS STATE JOURNAL OF MEDICINE, and one dollar shall go to the Medical Defense Fund.

Sec. 2. The Medical Defense Fund shall consist of the one dollar per capita assessed as the regular annual dues, which amount shall be set aside by the Trustees for the use of the Council on Medical Defense, to be drawn upon by vouchers signed by the Secretary of the Association, and countersigned by the chairman of the Council on Medical Defense. This fund shall be used for no other purpose than that set out in the by-laws relating to the function and duties of the Council on Medical Defense, except upon unanimous agreement of the said Council on Medical Defense and unanimously approved by the Board of Trustees.

Sec. 3. All motions or resolutions appropriating money shall specify definite amounts, or so much thereof as may be necessary for the purpose indicated, and must be approved by the Trustees.

Amend by changing Chapters X, XI, XII and XIII in proposed revision, to Chapters XII, XIII, XIV and XV, respectively.

Proposed revision, page 22, Sec. 14 and 15, insert proper numbers for sections and chapters referred to.

Other than this, your committee recommends the adoption of the proposed revision as printed.

Respectfully,

J. S. TURNER.
J. A. R. MOSLEY.
W. P. MCCALL.
N. D. BUIE.
H. A. MCDANIEL.

On motion of Dr. B. J. Hubbard of Kaufman, the report was received as read, and the House of Delegates went into a Committee of the Whole for the consideration of the report.

Arising from the Committee of the Whole, the House of Delegates resumed its session at 8:20 p. m., with Dr. J. S. Turner of Dallas, in the chair.

THE SECRETARY: As secretary of the Committee of the Whole, I desire to report that the committee has given diligent attention to the report of the Reference Committee on Amendments to the Constitution and By-Laws, that it has made a number of amendments, and a certified copy of the revised version as approved is herewith presented.

DR. B. J. HUBBARD of Kaufman: I move that the report be received and filed. This motion was duly seconded and carried.

ADOPTION OF NEW CONSTITUTION AND BY-LAWS.

DR. B. J. HUBBARD of Kaufman: I move that the constitution and by-laws as adopted in the Committee of the Whole, be now adopted by the House of Delegates, and spread upon the minutes.

The motion was duly seconded and unanimously carried.

NEW CONSTITUTION AND BY-LAWS.

CONSTITUTION.

ARTICLE I.—NAME AND PURPOSES.

Sec. 1. The name and title of this organization shall be the State Medical Association of Texas.

Sec. 2. The purposes of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Texas and to unite with similar associations of other States to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members, and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

ARTICLE II.—COMPONENT SOCIETIES.

Sec. 1. Component Societies shall consist of those County Medical Societies which hold charters from this Association.

ARTICLE III.—COMPOSITION OF THE ASSOCIATION.

Sec. 1. This Association shall consist of Members, Delegates and Guests.

Sec. 2. MEMBERS. The membership of this Association shall consist of those members of component county societies for whom the State Association has received the prescribed annual per capita assessment.

Sec. 3. Delegates. Delegates shall be those members who are elected or appointed in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

Sec. 4. Guests. Any distinguished physician not a resident of this State or any distinguished scientist not a physician and who is not eligible to membership in this Association, may become a guest during any Annual Session on invitation of the President of this Association, and shall be accorded the privilege of participating in all of the scientific work for that Session.

Article IV.—House of Delegates.

Sec. 1. The House of Delegates shall be the legislative body of the Association, and shall consist of (1) Delegates elected or appointed in accordance with this Constitution and By-Laws to represent their component county societies, (2) the Councilors, (3) Trustees, (4) Council on Medical Defense, (5) Council on Legislation and Public Instruction and (6) *ex-officio*, the President, Secretary and Treasurer.

Article V.—Scientific Sections, Councilor Districts and District Societies.

Sec. 1. The House of Delegates shall divide the scientific work of the Association into appropriate Sections.

Sec. 2. The House of Delegates shall divide the State into appropriate Councilor Districts.

Sec. 3. The House of Delegates shall provide for the organization of such district societies as will promote the best interests of the profession. When so organized, such societies shall be composed only of members of component societies of their respective councilor districts and shall be exclusively scientific and educational in character.

Article VI.—Officers.

Sec. 1. The officers of this Association shall be a President, President-Elect, three Vice-Presidents, a Secretary, a Treasurer, a Councilor for each councilor district, five Trustees, and three members of the Council on Medical Defense.

Sec. 2. The President, President-Elect and Vice-Presidents shall be elected for terms of one year each. The Secretary, Treasurer and Councilors shall be elected for terms of three years each. The Trustees shall be elected for terms of five years each. All these officers shall serve until their successors are elected and installed.

Sec. 3. The officers of this Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, and no person shall be elected to any such office who is not in attendance on that Annual Session and who has not been a member of the Association for the preceding two years.

Sec. 4. A Council on Medical Defense consisting of three members is hereby created.

Sec. 5. The members of the Council on Medical Defense shall be nominated by the retiring President of this Association, and shall be elected by the House of Delegates; provided, that additional nominations may be made from the floor. The term of office of the Council on Medical Defense shall be for three years; provided, that the first Council shall be elected for one, two and three years. No person shall be elected to this Council who is not in attendance on the Annual Session, and who has not been a member of the Association for the past two years. This Council shall serve without salary. The senior member of the Council in point of service shall be Chairman of the Council. The Secretary of the State Medical Association shall be an *ex-officio* member of the Council, and shall act as Secretary of the Council on Medical Defense.

Article VII.—Sessions and Meetings.

Sec. 1. The Association shall hold an Annual Session, during which there shall be held not less than two General Meetings, which shall be open to all registered members and guests.

Sec. 2. The time and place for holding each Annual Session shall be fixed by the House of Delegates at the preceding Annual Session, or by the Board of Trustees, as hereinafter provided.

Sec. 3. Special sessions of either the Association or the House of Delegates, or special meetings of either, shall be called by the president at his discretion, or on petition of thirty delegates.

Article VIII.—Funds and Expenses.

Sec. 1. Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by an equal per capita assessment on each component county society, by voluntary contribution, and from the profits of its publications and investments. Funds may be appropriated by the House of Delegates to defray the expenses of the Annual Sessions, and special sessions and meetings, for publications, and for such other purposes as will promote the welfare of the Association and the medical profession. All such appropriations and expenditures shall be approved by the Board of Trustees before becoming effective.

Article IX.—Referendum.

Sec. 1. The General Meeting of the Association may by a two-thirds vote of members present, order a referendum on any question pending before the House of Delegates.

Sec. 2. The House of Delegates may by a two-thirds vote submit any question to the General Meeting for final decision.

Sec. 3. The House of Delegates shall submit to the General Meeting for final decision any question which has been ordered in accordance with Section 1 and Section 2, of this Article.

Sec. 4. Any question brought before the General Meeting by operation of this Article shall be decided by majority vote of members present.

Article X.—The Seal.

Sec. 1. The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

Article XI.—Amendments.

Sec. 1. The House of Delegates may amend any Article of this Constitution by a two-thirds vote of the Delegates registered at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, published in the official organ of the Association, and sent officially to each component county society at least two months before the Session at which final action is to be taken.

BY-LAWS.

Chapter I.—Membership.

Sec. 1. All members of component county societies shall, by virtue of their membership, be members of this Association, when duly reported by the secretary of their respective county societies. The name of a physician on the properly certified roster of members of a component county society,

which has paid its annual assessment, shall be *prima facia* evidence of membership in this Association.

Sec. 2. Any person who is under sentence of suspension or expulsion from a component county society, or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Association or be permitted to take part in any of its proceedings, until he has been relieved of such disability. Any person who may be suspended for non-payment of dues is to be construed as coming within the provisions of this section.

Sec. 3. Each member in attendance at the Annual Session shall verify his name on the certified roster of the component society of which he is a member, when he shall receive a badge which shall be evidence of his right to all the provileges of membership in that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

Chapter II.—Sessions and Meetings.

Sec. 1. The Sessions of the Association shall consist of the General Meetings, meetings of the House of Delegates, and meetings of the Scientific Sections.

Sec. 2. The order of exercises as set forth in the official program shall be followed from day to day until completed, unless otherwise ordered by vote of the General Meeting.

Sec. 3. All papers and addresses read or delivered before the Association or any of its sections shall be the property of the Association and shall be deposited with the Secretary when read.

Sec. 4. General Meetings of the Associations shall be held in accordance with Article VII of the Constitution. One hundred members shall constitute a quorum. All registered members and guests shall have equal rights to participate in the proceedings and discussions, and, except guests, to vote on pending questions. The President shall deliver the Annual Address at a General Meeting.

Sec. 5. The General Meeting shall have authority to order referendum vote, in accordance with Article IX of the Constitution, receive and act upon all referred questions, and may recommend to the House of Delegates the creation of commissions and committees for scientific investigation and research or other purposes.

Sec. 6. The time and place of the Annual Session shall be determined by the House of Delegates. This duty may be conferred upon the Board of Trustees by the House of Delegates at the Annual Session. In the event of failure of the House of Delegates to select a time and place for the Annual Session, or to direct the board of Trustees to determine the same, or when the time and place selected shall appear incompatible with the best interests of the Association, the Board of Trustees shall have the authority and it shall be their duty to make the necessary alteration to the plans previously adopted.

Chapter III.—House of Delegates.

Sec. 1. The House of Delegates shall meet at 1:30 p. m., on the first day of the Annual Session. It shall so arrange its meetings as not to conflict with the General Meetings, and as far as possible allow Delegates an opportunity to attend the Scientific Sections. If the business of the Association require, the House of Delegates may remain in session after the final adjournment of the Annual Session. The order of business for the House of Delegates shall be arranged as a separate section of the official program.

Sec. 2. Each component county society which has made its annual report and which has at least five members enrolled, shall be entitled to representation in the House of Delegates in the proportion of one delegate for every one hundred members or less and one additional delegate for any additional fraction thereof.

Sec. 3. A majority of the registered delegates shall constitute a quorum, and all the meetings of the House of Delegates shall be open to members of the Association.

Sec. 4. The House of Delegates shall have charge of all matters pertaining to the Association which are not expressly otherwise delegated in this Constitution and By-Laws.

Sec. 5. It shall divide the State into fifteen councilor districts.

Sec. 6. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates, and such committees shall report to the House of Delegates in person, and may participate in any consequent discussion.

Sec. 7. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Sec. 8. All questions pertaining to Medical Ethics brought before the House of Delegates or the General Meeting shall be referred to the Board of Councilors without debate.

Sec. 9. All reports of officers and committees and all petitions, memorials and resolutions, shall be referred to the appropriate reference committees without debate.

Chapter IV.—Elections.

Sec. 1. The House of Delegates shall elect the officers of the Association, and delegates to the American Medical Association, and select the place for the following Annual Session, on the morning of the last day of the Annual Session. Nominations shall be from the floor of the House, and by members of the House. Nominating speeches shall not exceed two minutes in duration. No person known to have solicited votes for or sought any office within the gift of the Association shall be eligible to nomination for said office.

Sec. 2. All elections shall be by secret ballot and a majority of the votes cast shall be necessary to elect. When there are three or more nominees, the one receiving the least number of votes on each ballot shall be dropped until a majority vote is received by one of the said nominees.

Sec. 3. Delegates and alternate delegates to the American Medical Association shall be elected in accordance with the By-Laws of that organization.

Chapter V.—Duties of Officers.

Sec. 1. The President shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit the various sections of the State and assist the Councilors in building up county societies and making their work more practical and useful. He shall preside at all meetings of the Association and of the House of Delegates; appoint all committees not otherwise provided for; deliver an annual address at such time as may be arranged; cast deciding votes when there is a tie vote, and perform such other duties as custom and parliamentary usage may require.

Sec. 2. The President-Elect and the Vice-Presidents shall assist the President in the performance of his duties.

Sec. 3. In the event of the death or removal of the President, the President-Elect shall serve as

president until his successor shall have been duly elected.

Sec. 4. In the event of the death or removal of the President, the Board of Councilors shall within ten days thereafter elect one of the vice-presidents to fill out the unexpired term.

Sec. 5. The Secretary shall prepare and issue the programs one month before the Annual Session and attend all meetings of the Association and of the House of Delegates, and publish the minutes of their respective proceedings in the STATE JOURNAL. He shall be custodian of the seal, gavel and all record books and papers belonging to the Treasurer, Board of Trustees and Board of Councilors, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands and take his receipt for the same, or as directed by the Trustees. He shall provide for the registration of the members and delegates at the Annual Sessions. He shall keep a card index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and on request shall transmit a copy of the same to the American Medical Association. In so far as it is in his power he shall use the printed matter, correspondence and influence of his office to aid the Councilors in the organization and improvement of district and county societies, and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointments and duties. He shall employ such assistants as may be ordered by the Trustees. He shall annually make a report of his doings to the House of Delegates.

Sec. 6. The Treasurer shall be the custodian of all moneys, securities and deeds belonging to the Association which may come into his possession, and shall hold the same subject to the direction and disposition of the Board of Trustees. He shall give to the Board of Trustees a suitable bond for the faithful performance of his trust.

CHAPTER VI.—BOARD OF TRUSTEES.

Sec. 1. The Board of Trustees shall have charge of all properties and shall manage the financial affairs of the Association. At the first meeting of the Board following adjournment of the Annual Session it shall organize by electing a chairman and a secretary, and the chairman shall appoint such Committees as may be necessary or desirable. It shall be the duty of the Board of Trustees to provide for and superintend the publication of the TEXAS STATE JOURNAL OF MEDICINE, and all proceedings, transactions and memoirs of the Association. It shall have full discretionary power to omit from the TEXAS STATE JOURNAL OF MEDICINE, in part or in whole, or to abstract any paper that may be referred to it by any of the sections. It shall appoint a general manager and editor for the JOURNAL, which two positions may be held by one person, and such assistants as may be necessary, and shall determine their salaries and the terms and conditions of their employment. All resolutions or recommendations of the House of Delegates pertaining to the expenditure of money must be approved by the Board of Trustees before the same shall become effective. During the Annual Session of the Association the Board shall hold meetings as often as may be deemed necessary by the Chairman, and all matters referred to it by the House of Delegates shall be reported on within twenty-four hours, if so requested by the House. The Board of Trustees shall have the accounts of the Treasurer and of the JOURNAL office audited annually or oftener, if deemed necessary, and shall make an annual report on the same to the House of Delegates, which report shall also specify the character and cost of all the publications of the Association during the year and the amount of all properties belonging to the Association. In case of a vacancy in the office of Treasurer or Secretary on account of death or otherwise, the vacancy shall be filled by the Board of Trustees until the next annual session of the House of Delegates. The Board of Trustees shall fix the salary of the Secretary. Regular meetings of the Board shall be held immediately following adjournment of the Annual Session. Special meetings of the Board may be called at any time by the Chairman, or by three members of the Board, by mailing a written or printed notice to the last known address of each Trustee, at least five days before such meeting is to be held. The Chairman shall convene the Board upon request of the President of the Association and he shall lay before the Board any communication from the President as requested. Three members of the Board shall constitute a quorum.

CHAPTER VII.—BOARD OF COUNCILORS.

Sec. 1. The Board of Councilors shall consist of one Councilor for each Councilor District. It shall have authority to appoint vice-councilors to assist in the work of organization and administration in county and district societies; but such vice-councilors shall not be entitled to representation either on the Board or in the House of Delegates.

Sec. 2. Councilors shall where practicable organize county societies in their respective districts; they shall also when practicable organize district societies in their respective districts. When so organized such district societies shall confine their membership to members of county societies of their respective councilor districts.

Sec. 3. In sparsely settled sections that may organize two or more counties into one component society to be designated by hyphenating the names of the counties concerned so as to distinguish them from district societies. Such component societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies.

Sec. 4. The Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organization; for inquiring into the condition of the profession and for improving and increasing the zeal of county societies and their members. He shall make an annual report of the condition of the profession in each county in his district to the Board of Councilors. The Chairman of the Board shall make an annual report to the House of Delegates covering the same items for the entire State. The necessary traveling expenses incurred by Councilors and Vice-Councilors in the line of the duties herein imposed may be allowed by the Board of Trustees on proper itemized statements; but this provision shall not be construed to include the expenses of any Councilor or Vice-Councilor in attending the Annual Session of the Association.

Sec. 5. The Board of Councilors, through its Chairman, shall direct the Secretary of the State Association to issue charters to district and component county societies which have in the estimation of the Board, been organized in conformity with the Constitution and By-Laws.

Sec. 6. The Board of Councilors shall have the authority to revoke the charter of any district or component county society which, in the estimation

of the Board, is in conflict with the letter and spirit of this Constitution and By-Laws.

Sec. 7. The Board of Councilors is the Board of Censors of the Association. It shall consider all questions involving the rights and standing of members, whether in relation to other members, to the component societies, or to the Association. It shall hear and decide all questions of discipline pertaining to the conduct of members or of county societies on which an appeal is taken from the decision of an individual councilor. Its decision in all such cases shall be final.

Sec. 8. The Board of Councilors shall have the right to communicate to the public and the lay press the views of the profession and of the Association on all matters relating to the public health and to the Medical profession. Such communications shall be officially signed by the Chairman and Secretary of the Board.

Sec. 9. The Board of Councilors shall hold daily meetings during the Annual Sessions and at such other times as necessity may require, subject to the call of the Chairman or on petition of three councilors. It shall meet on the last day of the Annual Session for reorganization. At this meeting it shall elect a chairman and a secretary. The Chairman shall preside at all meetings of the Association and perform such other duties as may properly be delegated to him by the Board. He shall makes an Annual report to the House of Delegates at such time as may be provided. The secretary shall keep a record of the proceedings of the Board and perform such other duties as may be properly delegated to him by the Board.

Chapter VIII.—Council on Medical Defense.

Sec. 1. It shall be the duty of the members of the Council on Medical Defense, severally or collectively, to investigate and defend all damage suits against the State Medical Association of Texas; to investigate all claims of malpractice made against members; to take full charge of cases, which, after investigation, they will have decided to be proper cases for defense; to defend such cases to the end and pay all costs of such defense; but they shall not pay, or obligate the Council on Medical Defense or the State Medical Association to pay, any judgment rendered against any member upon the final determination of any such case. They shall be empowered to contract with such agents or attorneys as they may deem necessary, but shall always consult the defendant in employing attorneys.

Sec. 2. The assistance for defense, as herein provided, shall be available only to members of the State Medical Association of Texas in good standing. A member in arrears with annual dues shall not be entitled to Defense as herein provided.

Sec. 3. Any member or members of the State Medical Association of Texas threatened with suit for malpractice, who desires the assistance of the Council on Medical Defense, shall immediately that he becomes aware of the threat to sue, so notify the secretary of the Council on Medical Defense, or any member thereof, or the general attorney of the Association, in the instance there is not sufficient time to communicate with a member of the Council. The Secretary of the Council on Medical Defense, or any member or the general attorney, so notified, shall proceed immediately to investigate the circumstances reported, in the manner and after the procedure hereafter to be set out by the Council on Medical Defense, securing for the consideration of the said council full data and statement of facts and circumstances surrounding the filing of the suit or suits for its consideration, and permanent files. The member sued or threatened with suit, and under investigation by the Council on Medical Defense, shall be consulted and have the full confidence of the Council in all transactions connected with the investigation in question. The Council on Medical Defense shall have the authority to require of a county society or the president thereof, the appointment of a committee of investigation in any such case, and it may direct the said committee so appointed to report to the Council on Medical Defense and not to the society from which it is appointed.

Sec. 4. The Council on Medical Defense may also, at their discretion, appropriate funds to prosecute illegal practitioners and enforce the Medical Practice Act of this State.

Chapter IX.—Committees.

Sec. 1. The Committees of the Association shall be classified as follows: (a) Standing Committees; (b) Special Committees; (c) Reference Committees; (d) Special Delegates.

Sec. 2. All committees shall be appointed by the President, unless otherwise provided for in these By-Laws.

Sec. 3. The following (a) Standing Committees shall be appointed by the President as soon as possible following his induction into office:

(1) Committee on Scientific Work.
(2) Committee on Collection and Preservation of Records.
(3) Committee on Memorial Exercises.
(4) Committee on Transportation.
(5) Committee on Arrangements for the Annual Session.

Sec. 4. All committees created by the President or by resolution of the House of Delegates, for special purposes shall be known as (b) Special Committees. The duties of such Special Committees shall be clearly set out in the resolution or act responsible for their creation.

Sec. 5. As soon as practicable after the organization of the House of Delegates, the President shall appoint the following (c) Reference Committees, to consist of five members each. These committees shall consider and report upon all matters referred to them by the House, and shall report finally on all such matters on or before the final meeting of the session for which they were appointed:

(1) Reference Committee on Credentials.
(2) Reference Committee on Reports of Officers and Committees.
(3) Reference Committee on Resolutions and Memorials.
(4) Reference Committee on Finance.
(5) Reference Committee on Amendments to Constitution and By-Laws.
(6) Reference Committee on Scientific Work.

Sec. 6. The President shall appoint such (d) Special Delegates and representatives as may seem desirable or may be ordered by the House of Delegates.

Sec. 7. The Council on Legislation and Public Instruction shall consist of three members and the President and Secretary as *ex-officio* members. Members shall be appointed for terms of three years each, one member to be named by each retiring president; but in the first instance three shall be named and they shall draw lots for terms of one, two and three years, respectively.

Sec. 8. The Council on Legislation and Public Instruction shall, under the direction of the House of Delegates, represent the Association in securing legislation in the interest of the public health and of scientific medicine. It shall keep in touch with professional and public opinion, State and National, and endeavor to conserve the influence of the med-

ical profession in matters touching the public health. It shall work with the dignity becoming a great profession and with that wisdom which will make effective its power and influence. It shall have authority to be heard before the entire Association on questions of great concern at such time as may be arranged during the Annual Session. It shall cooperate with like committees from other organizations devoted to similar purposes, and shall work in conjunction with the Councilor of any District in which special activity is contemplated.

Sec. 9. The Committee on Scientific Work shall consist of five members. It shall consider and report on all matters of scientific interest, on its own initiative or by direction of the President or the House of Delegates. It shall consult or act in conjunction with such other organizations as may seem desirable in the accomplishment of its purposes.

Sec. 10. The Committee on Collection and Preservation of Records shall consist of three Past Presidents, appointed by the President upon nomination by the Association of Past Presidents; provided that the President shall have the authority to appoint on his own initiative, should the Association of Past Presidents fail to nominate in a reasonable time following the Annual Session. It shall be the duty of this committee to collect and preserve to the best advantage all records and data pertaining to the Association and its activities, which might be of interest to posterity, and which may eventually contribute to a comprehensive history of the medical profession of this State. The records and data collected by the committee shall be deposited with the State Secretary.

Sec. 11. The Committee on Memorial Exercises shall consist of three members. It shall be the duty of this committee to prepare and conduct appropriate services in memory of our dead, at such time as may be set aside for that purpose during the Annual Session.

Sec. 12. The Committee on Transportation shall consist of three members. It shall assist local committees in charge of arrangement for the Annual Session in all matters relating to transportation, fare, selling dates for excursions tickets, etc.; arrange for rates and special parties to the Annual Session of the American Medical Association, and consider any matter of transportation referred to the Association while the House of Delegates is not in session.

Sec. 13. The Committee on Arrangements for the Annual Session shall consist of five members and shall be appointed by the president on nomination of the county society in which the Annual Session is to be held; provided, that the president shall have the authority to appoint on his own initiative should the nomination here provided for be delayed beyond a reasonable time following the Annual Session preceding. Any vacancy on the Committee shall be filled by the president on nomination of the entertaining county society. It shall be the duty of this committee to provide through sub-committees of its own selection, suitable accommodations for the Annual Session. The requirements of the Annual Session shall be ascertained by consultation with the President, Secretary, and Chairman of the Board of Trustees. No social function shall be permitted to interfere with the meetings of the Scientific Sections as set forth in the official program, and no rearrangement of the official program as published shall be made in any particular except on permission of a General Meeting. No product or enterprise shall be exhibited in connection with any Annual Session which is not acceptable to the advertising pages of the TEXAS STATE JOURNAL OF MEDICINE.

Sec. 14. All committees must first obtain the approval of the Board of Councilors before making public any report or announcement concerning the work or policies of the Association.

CHAPTER X.—SCIENTIFIC SECTIONS.

Sec. 1. The scientific work of the Association shall be divided into the following sections:

(1) Section on Medicine and Diseases of Children.
(2) Section on Surgery.
(3) Section on State Medicine and Public Hygiene.
(4) Section on Gynecology and Obstetrics.
(5) Section on Ophthalmology, Otology, Rhinology and Laryngology.
(6) Section on Pathology.
(7) Section on Life Insurance.

Sec. 2. As soon as practicable after assuming office the President shall appoint a Chairman and a Secretary for each of the Scientific Sections. Their term of office shall be for one year and it shall be their duty to provide a program for their respective Sections, conduct the affairs of the Section while in session and perform such other duties as may be customary.

Sec. 3. The order of sections, papers, and discussions shall be followed as set forth in the official program issued from the office of the State Secretary, unless otherwise ordered by a General Meeting.

Sec. 4. All addresses and papers coming before the Scientific Sections shall be presented in typewritten manuscript. All papers so presented by members of the Association must first have been read before the county societies of which the authors are members.

Sec. 5. No paper or address coming before the Scientific Sections shall occupy more than twenty minutes in delivery, and discussions shall be limited to five minutes each.

Sec. 6. All papers read before the Scientific Sections shall be the property of the Association, and they shall be deposited with the Secretary of the section before which they are read. No member shall present a paper before more than one section at any Annual Session. Papers previously published as original in other medical publications shall not be eligible to publication in THE TEXAS STATE JOURNAL OF MEDICINE except on direction of the Board of Trustees.

Sec. 7. Petitions, memorials and resolutions originating in Scientific Sections shall be immediately referred to the House of Delegates and must be approved by the House of Delegates before becoming operative.

CHAPTER XI.—ASSESSMENT AND EXPENDITURES.

Sec. 1. An assessment of three dollars per capita on the membership of component county societies is hereby made the annual dues of the Association. Of this amount, one dollar shall be the subscription fee to the TEXAS STATE JOURNAL OF MEDICINE, and one dollar shall go to the Medical Defense Fund.

Sec. 2. The Medical Defense Fund shall consist of the one dollar per capita assessed as a part of the regular annual dues, which amount shall be set aside by the Trustees for the use of the Council on Medical Defense, to be drawn upon by vouchers signed by the Secretary of the Association, and countersigned by the Chairman of the Council on Medical Defense. This fund shall be used for no other purpose than that set out in the by-laws relating to the function and duties of the Council on Medical Defense, except upon unanimous agreement

of the said Council on Medical Defense, unanimously approved by the Board of Trustees.

Sec. 3. All motions or resolutions appropriating money shall specify definite amounts, or so much thereof as may be necessary for the purpose indicated, and must be approved by the Trustees.

CHAPTER XIII.—RULES OF CONDUCT.

Sec. 1. The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XIII.—RULES OF ORDER.

Sec. 1. The deliberations of the Association shall be governed by parliamentary usage as contained in Robert's Rules of Order.

CHAPTER XIV.—COUNTY SOCIETIES.

Sec. 1. All county societies now or hereafter organized, which have adopted principles of organization in accord with the Constitution and By-Laws, on application to and approval of the Board of Councilors, shall receive charters and become component parts of the Association.

Sec. 2. Charters shall be issued to component county societies only on the approval of the Board of Councilors and shall be signed by the President and Secretary of the Association. The Board of Councilors shall have the authority to revoke the charter of any component county society, the action of which it deems to be in conflict with the letter or spirit of this Constitution and By-Laws.

Sec. 3. Only one component county society shall be chartered in any county. Where more than one medical society exists in any one county, friendly overtures and concessions shall be made, with the aid of the councilor for the District if necessary, and all the members brought into one organization.

Sec. 4. Each component county society shall judge of the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable white and legally registered physician who will agree to practice non-sectarian medicine, shall be entitled to membership.

Sec. 5. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right of appeal to the Board of Councilors, which, on a majority vote, may permit him to become a member of another component county society.

Sec. 6. When a member in good standing in a component county society moves to another county, in this State, his name, on his request, shall be transferred without cost to the roster of the county society which receives him.

Sec. 7. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Sec. 8. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county; and systematic efforts shall be made by each member and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Sec. 9. Each component county society shall enforce the principles of Medical Ethics of the American Medical Association and shall discipline by reprimand, suspension or expulsion any of its members found guilty of fee-splitting in any of its forms, as defined by the Board of Councilors. Any county society which fails to take action in such cases shall forfeit its character on demand of the Board of Councilors.

Sec. 10. Frequent meetings shall be encouraged, and the most attractive programs possible arranged. The younger members shall be especially encouraged to do post-graduate and research work, and to give the society the first benefit of such labors.

Sec. 11. Component county societies shall consist of not less than five members and not less than five officers, as follows: a President, a Secretary-Treasurer, and three Censors.

Sec. 12. The fiscal year of component county societies shall be from January 1st to December 31st, inclusive, and officers shall be elected for the next fiscal year at the last regular meeting of the current fiscal year, or as soon thereafter as possible.

Sec. 13. At the time of the annual election of officers each county society shall elect a delegate and alternate or delegates and alternates to represent it in the House of Delegates of this Association, in the proportion of one delegate for each one hundred members or fraction thereof, and one additional delegate for each additional one hundred members or fraction thereof. The term of office of delegates and alternates elected under this section shall be for two years. The secretary of the county society shall supply the secretary of the State Medical Association with a list of such delegates and alternates at least ten days before the convening of the Annual Session, and cause to be accomplished such credentials and certificates of election as may be required for the convenience of the House of Delegates.

Sec. 14. The secretary of each county society shall keep a roster of its members, and a list of non-affiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice medicine in this State, and such other information as may be deemed necessary. He shall furnish annually an official report containing such information, on blanks supplied him for the purpose, to the Secretary of this Association not later than March 31st. This annual report shall be accompanied by the annual dues provided for in Section 1, Chapter XI, of these By-Laws. The county secretary shall note in his roster any changes of the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall account for every physician who has lived in the county during the year.

Sec. 15. Any component county society which fails to pay its assessment, as provided for in Section 1, Chapter XI, or make the reports required in Section 14, Chapter XIV, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

CHAPTER XV.—AMENDMENTS.

Sec. 1. These By-Laws may be amended at any Annual Session by a majority vote of the House of Delegates, after the amendment has laid on the table one day.

There being no further business to come before the House, on motion duly made and seconded, it adjourned to 9:00 a. m., Thursday, May 6th.

THIRD DAY---MAY 6

HOUSE OF DELEGATES.

MORNING SESSION.

The House of Delegates was called to order by President Dr. Boyd, at 9:30 a. m.

Roll call developed a quorum and the regular order of business was taken up.

Dr. M. B. Grace of Seguin read the report of the Committee on Insurance, as follows:

REPORT OF COMMITTEE ON INSURANCE.

Your Committee on Insurance respectfully reports that it has been in communication with all, or nearly all, of the county societies in the State in regard to enforcing, reviving or entering into an agreement, as individuals and not as societies, to enforce the five dollar flat fee for medical examinations for old line companies.

We have met with great negligence on the part of some secretaries in the matter of replies to the letter sent them. Occasionally three or four letters were needed and in a few instances no replies were elicited at all.

Of 148 county societies, the members of 81 are working under this agreement, 59 others (nearly all of whose members are working under this agreement) we are not ready to report on, but hope to be able to report in time for publication. Of the 59 counties not reported we estimate that at least 95 per cent are demanding and getting the $5.00 fee, direct from the companies. Therefore, only a small percentage of the examiners of Texas will, under any circumstances, make examinations for less. This percentage is so small that we regard the battle as won.

We beg to report further, that we have addressed letters of inquiry to all life insurance companies doing business in Texas, and we find the following companies paying $5.00 or more for their examinations:

STATE COMPANIES:

The Amarillo Life Ins. Co., Amarillo, Texas.
The American Home Life Ins. Co., Fort Worth, Texas.
The American National Life Ins. Co., Galveston, Texas.
The Amicable Life Ins. Co., Waco, Texas.
The Citizens Co-Operative Life Ins. Co., Fort Worth, Texas.
The Equitable Life Ins. Co., San Antonio, Texas.
The Fort Worth Life Ins. Co., Fort Worth, Texas.
The Gibraltar Life Ins. Co., Paris, Texas.
The Guarantee Life Ins. Co., Houston, Texas.
The Great Southern Life Ins. Co., Houston, Texas.
The National Temperance Life Ins. Co., Dallas, Texas.
The Prudential Life Ins. Co., San Antonio, Texas.
The Sam Houston Life Ins. Co., Dallas, Texas.
The San Antonio Life Ins. Co., San Antonio, Texas.
The San Jacinto Life Ins. Co., Beaumont, Texas.
The Southern Co-Operative Life Ins. Co., Fort Worth, Texas.
The Southern Union Life Ins. Co., Waco, Texas.
The Southland Life Ins. Co., Dallas, Texas.
The Southwestern Life Ins. Co., Dallas, Texas.
The Texas Life Ins. Co., Waco, Texas.
The Two Republics Life Ins. Co., El Paso, Texas.
The Wichita Southern Life Ins. Co., Wichita Falls, Texas.

OUT OF STATE COMPANIES:

Aetna Life Ins. Co., Hartford, Conn.
American Central Life Ins. Co., Indianapolis, Ind.
The Bankers Life Ins. Co., Des Moines, Iowa.
The Great Republic Life Ins. Co., Los Angeles, Cal.
The Capital Life Ins. Co., Denver, Col.
The Cherokee Life Ins. Co., Rome, Ga.
The Federal Life Ins. Co., Chicago, Ill.
The International Life Ins. Co., St. Louis, Mo.
The Jefferson Standard Ins. Co., Greensboro, N. C.
The Kansas City Life Ins Co., Kansas City, Mo.
The Louisiana State Life Ins. Co., Shreveport, La.
The Manhattan Life Ins. Co., New York City.
The Meridian Life Ins. Co., Indianapolis, Ind.
The Northwestern National Ins. Co., Minneapolis, Minn.
The Occidental Life Ins. Co., Albuquerque, N. M.
The Oklahoma National Ins. Co., Oklahoma City, Okla.
The Pacific Mutual Ins Co., Los Angeles, Cal.
The Pan American Life Ins. Co., New Orleans, La.
The Protective Life Ins. Co., Birmingham, Ala.
The Reliance Life Ins. Co., Pittsburgh, Penn.
The Security Life Ins. Co., Richmond, Va.
The United States Annuity & Life Ins. Co., Chicago, Ill.
The Volunteer State Life Ins. Co., Chattanooga, Tenn.

We recommend that the attention of the succeeding committee be directed especially to the companies doing business in Texas which have not yet adopted the $5.00 fee for examinations. We believe that correspondence along the proper lines will result in good.

In our correspondence some of the Medical Directors complained of the character of examinations that they had received at the hands of a few careless examiners.

Respectfully submitted,
M. B. GRACE, Chairman.

Referred to the Reference Committee on Reports of Officers and Committees.

Dr. W. M. Brumby of Waco, read the report of the Committee on Public Health, as follows:

REPORT OF COMMITTEE ON PUBLIC HEALTH.

We have the honor to report that your public health committee's work is becoming less and less each successive year, because "Health Conservation," the slogan of our profession, is being taken more seriously by the press and the public. We can now felicitate ourselves somewhat upon the results of past efforts, as the business interests, commercial organizations, big life insurance companies and like agencies of power and influence are at last aroused to an interest in public health matters. Our club women alone, working to the prevention of blindness in the new-born and the conservation of vision as outlined by the American Medical Association, lessens our work materially.

A most excellent State Board of Health law, presented to the last Legislature, was indorsed by this committee, after some modification, but failed to pass because of complaint by some of its opponents, of the excessive expense involved.

We have been diligent in bringing influence to bear on Congress to set aside one or more of the deserted army posts for use as sanitariums for the treatment of tuberculosis, several of which are excellently located for that purpose, are in a fine state of preservation, and at small expense could be converted into very practical institutions of this character. Failure at the last session does not cause us to lose heart.

Your committee joined the Texas Public Health Association and the State Board of Health in stimulating interest at the various points in the State visited by the Public Health Train. The members of county medical societies were requested to participate in the movement, and responded very promptly to the call. The limited State appropriation for the car necessitated economical management, and the liberal hearted manager of the Southern Pacific Railway Company (the late lamented W. G. Van Vleck) was appealed to and arrangement made for leasing a car at a nominal price, to the Texas Public Health Association, a charitable organization co-operating with the State Board of Health in this work. The exhibit installed by the State Board of Health comprised the usual illustrations, mottoes, models, etc., designed especially to call attention to the prevention of disease and the control of infection. Pamphlets and other reading matter were distributed. Stereopticon and moving picture exhibits, both interesting and instructive, were given at night, in connection with a lecture by a very capable representative of the

Health Department. The University of Texas has a capable young woman lecturer and demonstrator for the extension work of that institution, who every afternoon visited the local schools, giving lectures on hygiene, domestic science and similar topics. This most excellent work has had to be discontinued because of some questionable violation of the State Anti-Pass Laws, the State appropriation not being sufficient to continue the services if the usual railway transportation charges were made.

The chairman of your Public Health Committee attended the first meeting of the new State Board of Health and actively indorsed the appointment of six committees, each being composed of members of the board and two laymen selected because of their fitness for the work in hand, acting in an advisory capacity, who should be instrumental in popularizing public health work in the State.

The State law authorizing the issuance of county bonds for building hospitals has not been taken advantage of by as many of the wealthier counties of the State as was first thought probable, but it has put the people, and particularly the profession of these counties, to thinking, and results will surely follow.

Another field of endeavor, instituted and fostered by our profession and abetted by our committee, the Southern Sociological Congress, convenes in Houston May 9th, at which time many very important problems will be discussed by some of the leaders of thought along sociological, hygienic and sanitary lines in the South. It is to be hoped that many of our members will find it convenient to attend.

Although your committee has worked in a rather desultory manner, much progress has been made in our State along sanitary and public health lines during the year.

W. M. Brumby, Chairman.
W. Burton Thorning.
Joe E. Dildy.

Referred to the Reference Committee on Scientific Work.

Dr. W. F. Starley of Galveston, read the first report of the Reference Committee on Finance, as follows:

First Report of Reference Committee on Finance.

We, your Reference Committee on Finance, beg leave to report that we have carefully examined, and found in due form and correct in all details, the two reports referred to us, *viz:* (1) the Treasurer's report, and (2) the report of the Board of Trustees, and recommend that these reports be adopted as read.

We wish to commend the Treasurer on his painstaking care and attention to detail in the conduct of his office, and to express appreciation of the careful and lucid preparation of his report.

The report of the Board of Trustees shows faithful attention to the administration of the finances of the Association, and brings out the spirit of harmonious relationship and co-operation that has existed between the Board and the management of the Texas State Journal of Medicine.

The illuminating report of the Auditor, Mr. D. H. Kernaghan, shows at a glance the status of the Association's finances and the principal details of the various funds.

The excellent record of the Journal, which so nearly carried its own expense for the year just ended, and the financial results of the first year of Medical Defense, are matters of congratulation for the Association.

The Board of Trustees has stressed, and we wish to further emphasize the necessity of members of the Association calling the attention of advertisers to the Journal. This is a certain and powerful means whereby we can increase the usefulness of the Journal and augment the funds of the Association.

Respectfully submitted,
W. F. Starley, Chairman.
B. J. Hubbard.
T. S. Grissom.
W. A. Boyce.
A. J. Caldwell.

On motion of Dr. B. J. Hubbard of Kaufman, the report was adopted.

Dr. E. F. Cooke of Houston, read the first report of the Reference Committee on Resolutions and Memorials, as follows:

First Report Reference Committee on Resolutions and Memorials.

We, your Committee on Resolutions and Memorials, beg to submit the following report:

We have carefully and favorably considered the resolutions from the Section on State Medicine and Public Hygiene, suggesting a reduction of the penalty for failure to comply with the law on vital statistics, and also the resolutions from the La Salle-Frio County Medical Society, regarding compulsory vaccination.

We recommend that these resolutions be referred to the Council on Legislation and Public Instruction for further consideration. The two items mentioned follow:

Vital Statistics Resolutions Adopted by the Section on State Medicine and Public Hygiene.

Whereas, The law upon vital statistics is inadequate; and

Whereas, The penalty for failure to report births and deaths is so great that the local health officers hesitate to report the delinquents; therefore, be it

Resolved, That this law should be so amended in the matter of penalties as to read, not less than five dollars nor more than two hundred dollars.

John D. Covert, Chairman.
H. L. Wilder, Secretary.

Compulsory Vaccination Resolutions, from the La Salle-Frio County Medical Society.

Realizing that the physician is by the nature of his profession the guardian of the public health and that every true medical organization owes to the public its influence in preventing disease; and

Whereas, Smallpox is and has been ever since Jenner's gift to humanity of the vaccine virus, an easily preventable disease, by the simple means of vaccination, which, when properly done, is devoid of danger; and

Whereas, Our great State is annually forced to spend thousands of dollars, through her different counties, to check epidemics of this loathsome disease, not to mention the hundreds of valuable lives lost; and

Whereas, The economic loss from quarantine and detention amounts to thousands of dollars, all of which could in the course of a few years be entirely prevented if vaccination were made compulsory, by either the States individually or preferably by a Federal law; and

Whereas, Our State now has a compulsory educational law, which would be of vast assistance in enforcing a measure of this kind, by compelling vaccination upon entering school,

Therefore, Be it resolved, First, That the LaSalle-Frio County Medical Society desires to go on record as favoring a compulsory vaccination law for the prevention of smallpox; Second, that we favor a Federal law for this purpose, and if this is not obtainable then a State law; Third, that these resolutions be laid before the next meeting of the State Medical Association of Texas, urging that the legislative committee of that body take the matter up as soon as practicable, and if considered by them as wise, to be carried before the proper authorities of the American Medical Association at its next regular meeting; Fourth, that our visitor from the Bexar County Society, Dr. Homer T. Wilson, be asked to carry this question before his society for their assistance in getting it before the proper authorities; Fifth, that our secretary be instructed to communicate with as many as possible of the other societies throughout the State asking their support; Sixth, that we have no desire to dictate the exact provisions of such a law, but feel that the matter should be attended to at the

proper time in such a manner as the legislative committee may deem best.

Respectfully submitted,

E. F. Cooke, Chairman.
B. E. Braselton.
Lee Yater.
Chas. D. Dixon.

On motion, duly made and seconded, the report was adopted

Dr. A. C. Scott of Temple, read the first report of the Reference Committee on Scientific Work, as follows:

First Report Reference Committee on Scientific Work.

Your Committee on Scientific Work has carefully considered the several items referred to it by the House of Delegates, and begs to make report as follows:

(1) The report of the Committee on the Study of Pellagra shows careful and conscientious study, and the symposium on the subject prepared by the several members of the committee, and read before the Joint Session of the Scientific Sections, was indeed commendable. We recommend that the Committee be thanked for its faithful and efficient services, and that the committee be discharged.

(2) The report of the Committee on the Study of Cottonseed Meal as a Food for Humans indicates much progress, and we are pleased to commend the intelligent methods pursued. We recommend that the committee be continued.

(3) The report of the Texas Representative of the National Council on Medical Education is comprehensive and appears to cover the progress in medical teaching during the past year, with pleasing fidelity. We urge the careful reading of this report by every member of the Association.

(4) The efforts of the Committee on Scientific Exhibits is deserving of special notice. It indicates a remarkable success for a first effort, and the committee should be heartily commended and thanked for its intelligent efforts and the marked degree of success attained. Of special interest is the meat exhibit furnished by the Meat Inspection Service of the Bureau of Animal Industry, and we urge that the attention of our members be called to same, that they may gain a first-hand knowledge of the protection extended by this service to the meat-buying public of the State.

Respectfully submitted,

A. C. Scott, Chairman.
W. B. Halley.
Hines Clark.
W. S. Miller.
A. E. Sweatland.

On motion of Dr. Walter Shropshire of Yoakum, the report was adopted.

Dr. M. B. Grace of Seguin, read the first report of the Reference Committee on Reports of Officers and Committees, as follows:

First Report of Reference Committee on Reports of Officers and Committees.

Your committee has freely discussed and carefully considered the several recommendations made by the President and the Secretary, which were referred to us, and we are pleased to agree with them all in general terms, with the following specific comments:

(1) We do not think this an opportune time to inaugurate a system of taxation on the membership of the Association attending the Annual Sessions, for the purpose of defraying the expense of entertainment, as recommended in the President's Message.

(2) We recommend that the House of Delegates specifically indorse the position taken by the President and Secretary in the matter of the proposed change in the By-Laws of the American Medical Association, as proposed by the Judicial Council of that organization and as relates to extended jurisdiction over component associations.

(3) We recommend that the report of the Council on Medical Defense be approved, and that the council be commended for its diligence and the good work it has done during the first year of its existence.

(4) We recommend that the report of the Committee on Transportation be approved, and that the route therein recommended be adopted as the official route for the medical profession of Texas in attending the annual Session of the American Association in San Francisco, California, June 22 to 26.

(5) We recommend that the report of the Committee on Care of Indigent Physicians be accepted and the committee commended for its efforts in the line of its duty.

(6) We beg to commend the Board of Councilors for the good work evidently done during the year, as shown in the report of the chairman thereof.

(7) We desire to emphasize the importance of the work of the Committee on Publicity, and urge that hereafter the requirements of the committee be more promptly and fully complied with. The plan adopted by the retiring committee, of obtaining a 200-word synopsis of each paper for the use of the public press, would seem to be of no little importance if the press expects and hopes to present to the public generally anything like a concise and intelligent account of this feature of our Annual Sessions.

(8) We recommend the acceptance of the report of the Committee on Sale of Poisonous Drugs.

(9) We recommend that the report of the Texas Representative of the National Legislative Council be received and that he be thanked for his services.

(10) We recommend that the report of the Committee on Defectives and Dependents be accepted and the committee thanked for its efforts. The several recommendations made therein are entitled to the careful consideration of the entire Association, but more particularly those who shape its policy.

Respectfully submitted,

M. B. Grace, Chairman.
W. H. Walker.
A. C. De Long.
Chas. C. Gidney.
J. Allen Kyle.

On motion of Dr. Walter Shropshire of Yoakum, the report was adopted.

Dr. John T. Moore of Houston, read an additional report of the Board of Trustees, as follows:

Additional Report of the Board of Trustees.

The Board of Trustees has decided to present to you the contracts that are to be entered into by the State Association, through the Board of Trustees and the Council on Medical Defense, with various indemnity insurance companies, for legal and technical reasons, and ask you by resolution to instruct or authorize us to make the contracts in question. These contracts have been drawn by our General Attorney, Judge Wolfe, and as far as the Board knows they are correctly drawn, and we merely feel that it would be much better for you

by resolution to direct us to enter into these contracts.

Jno. T. Moore, Chairman.
W. R. Thompson, Secretary.
J. S. Turner.
R. R. White.

Referred to the Reference Committee on Reports of Officers and Committees.

The Secretary read a communication from the State Association of County Secretaries, as follows:

Communication from the State Association of County Secretaries.

The State Association of County Secretaries, realizing the desirability of a closer relationship between the House of Delegates, the Board of Councilors and the County Secretaries, herewith begs to extend to the House of Delegates a cordial invitation to spend an hour in joint session, at some suitable period during the day, for the discussion of subjects of vital interest to organized medicine.

Respectfully,
Frank G. Sanders, President.
H. L. Wilder, Secretary.

Upon motion the communication was received and filed.

Dr. S. A. Woodward of Fort Worth, chairman of the Arrangement Committee, read the report of that committee as follows:

Report of the Local Executive Committee.

Your committee begs to report that immediately upon appointment a meeting was held and the committee organized according to custom. The requisite number of sub-committees were appointed and every effort made to meet the requirements of the Trustees and the responsible officers of the Association. Particular attention was given to arrangements for the registration and information bureaus, and for the scientific and commercial exhibits. The sub-committee was warned to permit no commercial exhibits not approved by the Association, and the injunction has been observed with an exception which it has seemed difficult to avoid without embarrassment, under the peculiar circumstances surrounding the case. We trust the entertainment provided has proven agreeable.

Respectfully submitted,
S. A. Woodward, Chairman.

Referred to the Reference Committee on Reports of Officers and Committees.

Dr. Walter Shropshire of Yoakum, introduced an amendment to Section 6, Chapter VIII, of the By-Laws, which was referred to the Reference Committee on Amendments to the Constitution and By-Laws.

Dr. Albert Woldert of Tyler, arising to a point of personal privilege, stated that in the report of the Committee on Publicity he made the statement that the local papers had not used the synopses and abstracts furnished them. He stated that he was mistaken in that respect, and that the *Star-Telegram* especially had used quite a number of them.

Election of Officers.

President Boyd here announced that the House of Delegates would proceed with the election officers, and appointed the following tellers: Drs. B. J. Hubbard, E. F. Cooke, A. E. Sweatland and D. J. Jenkins.

The President: Gentlemen of the House of Delegates, nominations are now in order for the office of President.

Dr. John S. Turner of Dallas: I move that the privileges of the floor be tendered Dr. Marvin L. Graves of Galveston, for the purpose of nominating Dr. G. H. Moody of San Antonio.

This motion was duly seconded and carried.

President.

Dr. M. B. Grace of Seguin: It is with pleasure I arise this morning to nominate for President a man who has for many years reflected credit upon the medical profession of the State of Texas. His widowed mother moved to Texas when he was six years of age, and by hard work, muscle, brain, farming, and working his way through school, he eventually got into a drug store, and through studying there, borrowing and saving, he attended a medical college and graduated. Beginning with poverty and going on up, meeting obstacles as he came, he early attained an eminence in the medical profession in Texas second to none. In 1879 this man attended his first meeting of the State Medical Association, in Sherman. Since that time he has been a constant attendant; only one or two meetings have been missed, through force of unavoidable circumstances. All of this time he has been a contributor, organizer and worker in organized medicine; and in his county and in his district he has been largely instrumental in building up strong organizations.

I shall not attempt any oratory, but simply present this man, whose ability is unquestioned, whose integrity is unquestioned, and who will shed luster upon this organization. The little city of Denton comes to you with open hand and says, "Here is our honored son, who has spent his life in our town; we have showered every appreciation on him that is within our power." The Denton County Medical Society comes to you and says the same. And now we ask you to honor this man by crowning his life with the glory that will come in the presidency of the State Medical Association of Texas. I speak of Dr. J. M. Inge of Denton. (Applause.)

Dr. Marvin L. Graves: Deeply appreciating the courtesy of the privilege of this floor, permit me at the outset to congratulate you and your fellow officials in this House upon the great year of successful work for organized medicine, and to congratulate this body upon its magnificent meeting that we are all enjoying in the city of Fort Worth.

I come with your permission to nominate for the office of president of this Association, a man whom I have intimately known for nearly twenty years. I have been associated with him in every professional relationship and almost in every private and personal relationship of life. My knowledge of his character and accomplishments prompts me to say of him today things that I am sure will be reconized as true by every one who knows him well. During the trying times of the administration of the affairs of one of the great eleemosynary institutions of this State, it was my privilege to have him associated with me in an official capacity, and at all times I have had his unstinted support, the wisdom of a wise counsel and his comforting help in all the trying hours of the work. I have had him associated with me personally in my family relationship, and there have been times that tried my soul when this man came into my life with cheer and comfort and sympathy, and nothing that I could say would adequately express my appreciation of that friendship and of that assistance. He was with me when the angel of the resurrection came to my home and took from it a blooming flower of childhood and transplanted it from this earthly soil to the beautiful gardens of heaven. I have been privileged to be with him when the shadow of a great illness hung over him, and when the gate that swings between Forever and No-More seemed to stand ajar for his entering spirit; and I have seen on these occasions a

great equanimity of mind, fortitude of soul and an unfaltering belief in the eternal verities, comfort and sustain him in this trying hour; and I have seen him rise to health and usefulness again, and a prayer of thanksgiving to Almighty God has arisen in my soul for the privilege of having this man continue his active work among us.

I have seen him in every relationship of organized medicine, from high private in the ranks in the local society, in the district society, in the regional associations, and in the American Medical Association, serving with fidelity and efficiency in every position, from the rank of private to the highest official positions that these organizations have been able to bestow upon him; anu today I tell you he is a man who would rather be a doorkeeper in the house of organized medicine than to dwell in the palaces of unorganized medicine. I want to name and request for your suffrage, as president of this Association, a man of stainless character and in whom there is no variableness or shadow of turning, a doctor of distinction and with unfaltering loyalty to all the highest principles and practices of organized medicine, Dr. G. H. Moody of San Antonio. (Applause.)

Dr. Walter Shropshire of Yoakum: I wish you to consider that I have just repeated what Dr. Graves has said about Dr. Moody; in addition to that, I wish you to consider another fact, that there are others who have just as nice a character as he and of whom all these good things may be said. Dr. Moody has been a member of this Association nearly twenty years and Dr. Inge has been a member thirty-five years, with a record of as faithful service as man could give. Both have been equally faithful. There is another feature. This Association should not confine its honors at all times to one class of its members; the cities of Texas bear their membership share of this Association, but the boys from the country come out occasionally. I appeal to you now to not cast all the honors on the city doctors; they are worthy, they are capable, but in the smaller towns are men just as worthy and just as capable. If you will go back through our list of presidents you will find that in fifteen years three have come from the smaller towns of Texas, and nearly eighty per cent of the membership reside in the smaller towns of Texas. Therefore, I claim of you the privilege of electing a man from the small town once in a while. Another thing, the specialist of this Association seems to claim all the honors. Go back to two or three years ago and you had the insane Dr. Turner of Dallas for president—now they come here with another insane man, Dr. Moody, for president. Let's have a variation. I second the nomination of Dr. Inge of Denton. (Applause.)

Dr. N. J. Phoenix of Colorado City, seconded the nomination of Dr. Inge.

Drs. W. M. Brooks of Limestone county, W. A. King of San Antonio and D. J. Jenkins of Daingerfield, seconded the nomination of Dr. Moody.

Drs. J. E. Gilcrest of Gainesville, G. D. Lain of Denton, J. H. Ball of Crystal Falls, B. J. Hubbard of Kaufman, seconded the nomination of Dr. Inge.

On motion of Dr. S. C. Parsons of San Angelo nominations were closed and ballot ordered.

Dr. W. C. Dickey of Memphis: As chairman of the Credentials Committee, I have to report that we have made final revision of the roll of members and I now hand to the Secretary this revised list. The names that have been called or will be called by the Secretary are the names of the regularly seated delegates entitled to vote in this election.

The Secretary called the roll and it was found that 113 delegates were present.

The vote was cast and the Secretary announced that the ballot stood 43 for Dr. Inge and 63 for Dr. Moody.

The President then announced that Dr. Moody, having received a majority of the votes, was duly elected President of the State Medical Association of Texas.

PRESIDENT ELECT.

Dr. E. H. Cary of Dallas, nominated Dr. J. M. Inge of Denton, for President Elect.

Drs. G. T. Thomas of Amarillo, A. S. McBride of Greenville, C. E. Cantrell of Greenville, seconded the nomination of Dr. Inge.

Dr. A. W. Carnes of Dallas, nominated Dr. John O. McReynolds of Dallas, and this nomination was seconded by Dr. W. D. Jones of Dallas.

Dr. H. F. Connally of Waco, nominated Dr. S. P. Rice of Marlin, which nomination was duly seconded.

Dr. Walter Shropshire of Yoakum, moved that the nominations be closed, which motion was duly seconded and carried.

Upon request of Dr. Connally the name of Dr. S. P. Rice was withdrawn from nomination.

The ballot was collected and counted in part.

Dr. W. D. Jones of Dallas: I wish to withdraw the name of Dr. John O. McReynolds, and I move that Dr. Inge be elected President Elect by unanimous vote.

Dr. A. W. Carnes of Dallas: I second the motion.

The motion carried and the President announced the election, unanimously, of Dr. J. M. Inge as President Elect.

VICE-PRESIDENTS.

Dr. John T. Moore of Houston, nominated Dr. M. F. Bledsoe of Port Arthur. Dr. A. R. Sholars of Orange seconded the nomination.

Dr. J. L. Burgess of Waco, placed in nomination Dr. H. C. Black of Waco, and this nomination was duly seconded.

Dr. G. T. Thomas of Amarillo, placed in nomination Dr. T. D. Frizzell of Quanah, and this nomination was duly seconded.

On motion of Dr. W. D. Jones of Dallas, the nomination for vice-presidents were closed, and those nominated were elected by acclamation.

TRUSTEE.

Dr. C. E. Cantrell of Greenville, presented the name of Dr. W. R. Thompson of Fort Worth for reelection as Trustee.

On motion of Dr. W. D. Jones of Dallas, nominations were closed and Dr. Thompson was elected by acclamation.

COUNCILORS.

Dr. R. L. Ramey of El Paso, nominated Dr. F. P. Miller of El Paso, to succeed himself as Councilor of the First District.

Dr. W. B. Halley of Ballinger, put in nomination for Councilor of the Fourth District Dr. S. C. Parsons of San Angelo to succeed himself. Drs. W. N. Fenley of Menard, A. C. De Long of San Angelo and N. J. Phoenix of Colorado, seconded the nomination of Dr. Parsons.

Upon motion of Dr. Walter Shropshire of Yoakum, nominations were closed, the rules suspended and the secretary directed to cast the unanimous vote of the House for Dr. Parsons to succeed himself as Councilor of the Fourth District.

Dr. J. L. Burgess of Waco, nominated Dr. C. C. Nash of Palestine, for Councilor of the Eleventh District. The nomination was seconded by Drs. N. D. Buie of Marlin and A. C. Scott of Temple, and

upon motion of Dr. S. C. Parsons of San Angelo, nominations were closed and the Secretary directed to cast the unanimous vote of the House for Dr. C. C. Nash of Palestine, as Councilor of the Eleventh District.

On motion of Dr. W. L. Allison of Fort Worth, the privilege of the floor was granted Dr. James J. Terrill for the purpose of placing in nomination some one for Councilor of the Thirteenth District.

Dr. Terrill nominated Dr. Charles B. Williams of Mineral Wells.

Dr. J. H. Eastland of Mineral Wells, placed in nomination Dr. R. A. Duncan of Graham.

Upon motion, duly seconded, nominations were closed. The ballot disclosed the election of Dr. Charles B. Williams of Mineral Wells, as Councilor of the Thirteenth District, and the President so announced.

Dr. W. L. Allison of Fort Worth, moved that Dr. H. W. Cummings of Hearne, be granted the privilege of the floor. This motion was duly seconded and carried.

Dr. Cummings nominated Dr. S. A. Woodward of Fort Worth, for Councilor of the Fourteenth District.

Dr. B. J. Hubbard of Kaufman, put in nomination Dr. A. W. Carnes of Hutchins, for re-election as Councilor of the Fourteenth District.

Nominations were closed. The ballot disclosed 45 votes for Dr. Carnes and 35 votes for Dr. Woodward, and the President announced the election of Dr. A. W. Carnes of Hutchings, as Councilor of the Fourteenth District.

DELEGATES TO THE A. M. A.

For the expired term of Dr. C. A. Smith of Texarkana, Dr. Frank Paschal nominated Dr. A. B. Small of Dallas. This nomination was seconded, and upon motion of Dr. Wardlaw nominations were closed and the Secretary was instructed to cast the ballot of the House for Dr. Small as Delegate to the A. M. A.

Dr. C. E. Cantrell of Greenville, moved that Dr. Holman Taylor of Fort Worth be unanimously elected to succeed himself as Delegate to the A. M. A., and that the President cast the ballot of the House for Dr. Taylor, which was, upon unanimous vote, accordingly done.

Dr. Wallace Ralston of Houston, placed in nomination Dr. M. M. Carrick of Dallas, as Delegate to the A. M. A., and upon motion of Dr. C. E. Cantrell of Greenville, nominations were closed and the Secretary instructed to cast the unanimous vote of the House for Dr. Carrick.

Drs. Frank Paschal of San Antonio, E. H. Cary of Dallas, and John H. Foster of Houston, were duly nominated as Alternate Delegates to the A. M. A., and upon motion, duly seconded and carried, the Secretary was instructed to cast the unanimous vote of the House for those nominated, filling the vacancies in the order named.

Dr. E. F. Cooke of Houston, upon nomination of the retiring President, was unanimously elected to succeed himself as member of the Council on Medical Defense.

PLACE OF MEETING.

Dr. W. F. Starley of Galveston: The city of Galveston extends a sincere and cordial invitation to this Association to held its next Annual Session in Galveston. If you accept this invitation to come to us, the second greatest seaport of the United States, and the playground of Texas, we assure you an enthusiastic and hearty welcome. I desire to read to you the following communications:

My Dear Doctor:

In compliance with the resolution which was unanimously passed at a recent meeting of the Galveston County Medical Society, I hereby instruct you as Delegate to deliver to the State Medical Association of Texas, at their meeting at Fort Worth, a most cordial and pressing invitation to hold the next session in Galveston. I also hand you herewith letters of invitation from the Mayor of this city and from the President of the Galveston Commercial Association.

You are expected as Delegate to use your best efforts and influence to have the State Association accept this invitation, and we cordially hope you will be successful in your mission.

Yours very truly,
Geo. H. Lee,
President, Galveston County Medical Society.
May 3, 1915.

Dear Doctor:

I understand that if the proper persuasion is used, we can secure for Galveston the next 1916 meeting of the State Medical Association, and I am writing you to request that you extend them an invitation to meet in hospitable Galveston next year.

We believe that Galveston is the ideal convention city of Texas, and in addition to the many already well established reasons why the next session of the State Medical Association should be held in Galveston, you can offer them the further inducement of a new and magnificent Auditorium in which to held their sessions. In this building there are many well arranged committee rooms and other rooms for exhibits of any kind which might be necessary.

I therefore nominate, constitute and appoint you as the representative of Galveston to present this invitation to your associates, and you can assure them that no city in Texas would be more delighted to receive and entertain them.

Very respectfully yours,
Lewis Fisher,
May 1, 1915. Mayor.

Dear Sir:

The commercial interests of Galveston desire that you extend to the Texas State Medical Association a most cordial invitation to hold their 1916 convention in the City of Galveston.

We have had the pleasure in the last two or three years of entertaining a number of different medical associations. Coupled with the fact that there is in Galveston one of the most complete medical colleges in the Southwest is the further climatic condition that tends to improve and operate favorably upon the health of our visitors. The unusual and intensely interesting situations found at the seaport will, we are sure, be attractive to the members of the Texas State Medical Association, and on behalf of the commercial interests we desire you as President of the Galveston County Medical Society to extend to the State organization an invitation to meet with us in 1916.

Yours truly,
Galveston Commercial Association.
H. H. Haines,
May 3, 1915. Traffic Manager and Acting Secretary.

We have with us today one of the City Commissioners of Galveston, who is also a member of the State Medical Association, Dr. H. O. Sappington. Dr. Sappington supplemented the invitation of Dr. Starley, and assured the Association of a cordial welcome.

On motion of Dr. R. L. Ramey of El Paso, nominations were closed and Galveston unanimously selected as the place of the next Annual Session.

Dr. A. W. Carnes of Hutchins, introduced resolutions relating to the matter of relationship between hospitals and the visiting staffs thereof, and referring specifically to a Dallas hospital, which was referred to the Reference Committee on Resolutions and Memorials.

A communication from Mrs. Nannie Webb Curtis, requesting the adoption of resolutions condemning the use of alcohol as a medicine, was referred to the Reference Committee on Resolutions and Memorials.

The Secretary laid before the House resolutions from the State Association of County Secretaries, which were referred to the Reference Committee on Resolutions and Memorials.

Dr. C. C. Gidney of Plainview, introduced resolutions of thanks, which were referred to the Reference Committee on Resolutions and Memorials.

The President announced the following committees to introduce the newly elected officers to the General Meeting:

COMMITTEES TO INTRODUCE THE NEWLY ELECTED OFFICERS.

The President.—Drs. M. L. Graves and D. J. Jenkins.

The President Elect.—Drs. E. H. Cary, J. E. Gilcreest and M. B. Grace.

The Vice-Presidents.—Drs. A. R. Sholars, H. F. Connally and G. T. Thomas.

Trustee.—Dr. E. H. Cary.

Councilors.—Drs. R. L. Ramey, A. C. De Long, J. L. Burgess, J. J. Terrill, B. J. Hubbard.

Delegates and Alternates to the A. M. A.—Drs. C. E. Cantrell and F. Paschal.

Council on Medical Defense.—Dr. F. P. Miller.

On motion, the House adjourned to meet at 2 p. m., with the General Meeting, and thereafter, at 4 p. m., for the consideration of unfinished business.

GENERAL MEETING—PRESENTATION OF NEWLY ELECTED OFFICERS.

The Association was called to order at 2 p. m., in the Auditorium of the First Baptist church, by President Dr. Boyd.

The Secretary read the list of the newly elected officers, as follows:

NEWLY ELECTED OFFICERS.

President.—Dr. G. H. Moody of San Antonio.

President Elect.—Dr. J. M. Inge of Denton.

Vice-Presidents.—Drs. M. F. Bledsoe of Port Arthur, H. C. Black of Waco, and T. D. Frizzell of Quanah.

Trustee.—Dr. W. R. Thompson of Fort Worth.

Councilors.—District No. 1, Dr. F. P. Miller of El Paso; District No. 4, Dr. S. C. Parsons of San Angelo; District No. 11, Dr. C. C. Nash of Palestine; District No. 13, Dr. C. B. Williams of Mineral Wells; District No. 14, Dr. A. W. Carnes of Hutchings.

*Delegates to the American Medical Association.**—Place No. 1, Dr. A. B. Small of Dallas; Place No. 3, Dr. Holman Taylor of Fort Worth; Place No. 5, Dr. M. M. Carrick of Dallas.

*Alternate Delegates to the American Medical Association.**—Place No. 1, Dr. Frank Paschal of San Antonio; Place No. 3, Dr. E. H. Cary of Dallas; Place No. 5, Dr. J. H. Foster of Houston.

Place of Meeting.—Galveston.

SECRETARY'S NOTE:—The record as published last year was somewhat in error as to the "Place" to which Delegates and Alternate Delegates to the American Medical Association were elected. The above is correct, and the hold-over Delegates are as follows: Place No. 2, Dr. C. E. Cantrell of Greenville; Place No. 4, Dr. M. L. Graves of Galveston. The hold-over Alternates are: Place No. 2, Dr. W. B. Russ of San Antonio; Place No. 4, Dr. Albert Woldert of Tyler

INTRODUCTION OF NEWLY ELECTED OFFICERS.

Dr. Marvin L. Graves of Galveston, introduced the President with a few well received remarks.

Responding, Dr. Moody said, in part:

ADDRESS OF NEWLY ELECTED PRESIDENT.

After listening to the remarks of my good friend, Dr. Graves, and after hearing of the remarks he made in nominating me this morning, I am placed in the position of a sweet old maid I once heard of, who, when her friends came to her one day and informed her it was reported that she was engaged to be married, said, "No, but I am thankful for the report." I accept this honor that you have bestowed upon me in elevating me from the ranks to the highest position that the State Association can bestow upon one of its members. I accept it with as much gratitude as any man, I think, could possibly accept a position. I accept it with much pleasure and with some degree of regret—regret that the many good men who are more deserving than I cannot share this honor with me. I hope the time will come when we will all live long enough that each man who deserves can be honored. I accept the position with a feeling of great responsibility, and I say candidly that I take my election—not myself—with a great deal of seriousness, because there is a great deal for our Association to accomplish. There is much for us to accomplish in the way of advancing ourselves with the one final object in view, the good that may be achieved for those depending on us in their distress and misery, and who are looking to us to save others. This has been, and will continue to be, the final object of our lives from the time we take up the first medical book until we present ourselves on the final day of judgment; and it should be our every aim from the time we wake until we go to sleep to do our very best to serve those who are depending upon us and to place ourselves in position to gain all the advancement we can, by our association together and by the opportunities that are presented to us to advance our knowledge in medicine.

I have attained this honor, I assure you, without a favor obligated to bestow, without an enemy that I know of in the medical profession of Texas, or anywhere else, and in the administration of those affairs which I shall be called upon to administer, I hope that each one present will remember that everything I do will be for the good, as I see it, of the medical profession of Texas, and will be in an effort to advance, as much as I possibly can, the interests of every member of the State Medical Association of Texas. I am depending upon every one present to help me, and I wish to say that the number who live in the remotest cross-road of Texas, if he is doing his very best to gain all the knowledge he can, and to study every case that is entrusted to him, and to give that patient his very best efforts, looks just as good to me as the greatest physician in the greatest city in Texas. (Applause.)

Dr. Boyd, in surrendering the gavel, said:

I feel in turning over this gavel to Dr. Moody, that there could be no one to whom I would have greater pleasure to relinquish it. Dr. Moody has been my friend for many years, and I deem it a privilege to yield this office to him, because I know it will be well taken care of. And while I am here, I want to say to Dr. Moody that our State Secretary is always willing and ready to render any assistance he can, and I want to say for him that the success that has been attained during my administration unquestionably depends largely upon his efforts; he has been—well, he has been pretty nearly everything, and I could not have done anything without him; I want to commend him to Dr. Moody's tender mercies. He is going to be a great helper to you, and he is a great helper for the State of Texas. I would like to say more, but I cannot in his presence. I gladly present you this gavel, and say to you that I will always do everything I can within my ability.

DR. MOODY: I thank you. I wish to say that the remarks of the President about our Secretary were entirely unnecessary, because I have known him for quite a number of years and I am thoroughly convinced of his ability, sincerity, integrity and energy, and I know he will continue to do the greater part of the work.

Dr. M. B. Grace of Seguin, presented President Elect Dr. J. M. Inge of Denton, who responded in part as follows:

ADDRESS OF NEWLY ELECTED PRESIDENT ELECT.

I consider this the highest honor that has ever come to me, or ever will come to me again. For years, when I was working in the interest of organized medicine, at home and away from home, I had no thought that such an honor as this would ever come to me, and it has convinced me that if a man will be faithful and diligent in the line of his duty he will come into his own some day. I thank you for the honor bestowed upon me.

Dr. A. R. Sholars of Orange, introduced Dr. M. F. Bledsoe of Port Arthur, newly elected Vice-President, who responded as follows:

ADDRESS OF NEWLY ELECTED VICE-PRESIDENT DR. BLEDSOE.

I am thoroughly sensible of the honor conferred upon me by my election as Vice-President of this Association, and it is one I am personally proud of and one I am proud of for my district; and while there are quite a number of others more worthy by age and years of service than I am, there are none more zealous in behalf of organized medicine for the principles upon which it is founded.

Dr. H. F. Connally of Waco, introduced Dr. H. C. Black of Waco, newly elected Vice-President, who responded as follows:

ADDRESS OF NEWLY ELECTED VICE-PRESIDENT DR. BLACK.

I can recall only one thing in my life that has given me any more pleasure than the honor you have conferred

upon me today. That other occasion was when a Scotchwoman, who is now my wife, first made up her mind that she thought enough of me and had confidence enough in me, to become my wife. The difference in that occasion and this is that I put in a good many anxious months helping her to make up her mind to that effect. I would like to go to each and every one of you and say to you individually how much I appreciate this honor. When we have passed into the Elysian Fields of the blessed, I hope I will have a chance to do this. The only obstacle I am afraid of is that your action today may put a mark on your record, and you may not get there.

Dr. G. T. Thomas of Amarillo, introduced Dr. T. D. Frizzell of Quanah, newly elected Vice-President, who thanked the Association for the honor done him.

Dr. E. H. Carey of Dallas, introduced Dr. W. R. Thompson of Fort Worth, Trustee, who thanked the Association for the honor conferred upon him by continuing him as Trustee after ten years of service.

Dr. J. L. Burgess of Waco, introduced Dr. C. C. Nash, Councilor of the Eleventh District, who responded with appropriate thanks for the honor conferred upon him.

Dr. B. J. Hubbard of Kaufman, introduced Councilor Dr. A. W. Carnes, who thanked the Association for the honor done him.

Dr. C. E. Cantrell of Greenville, introduced Dr. M. M. Carrick; Dr. Frank Paschal introduced Dr. A. B. Small; Dr. C. E. Cantrell introduced Dr. Holman Taylor and Dr. John H. Foster, Delegates and Alternate Delegates to the American Medical Association, all of whom made brief and appropriate responses.

Dr. R. L. Ramey introduced Dr. F. P. Miller, Councilor from the First District, who responded in a fitting manner.

Dr. E. F. Cooke of Houston, elected to succeed himself as a member of the Council on Medical Defense, upon being introduced, attempted to address the Association, but was placed under arrest by Sergeant of Police, Dr. F. P. Miller of El Paso, who had announced on the day of his appointment that his idea was that crime should be prevented by halting the commission thereof. Dr. Cooke, however, prevailed upon the leniency of the court and proceeded. He particularly urged on every member of the Association that he should not criticise by word, look or action, any other physician's conduct of a case, because such action has a pronounced bearing on medical defense.

Dr. Cooke also reported that the State Medical Association Police Force had been fortunate in the luck of the usual police officer, in that they had usually managed to get away while the trouble was in progress, and that they had not been called upon to exercise the privileges accorded by the city of Fort Worth, it became his duty at this last moment to announce that he held warrants for the arrest of three members of the Association. These warrants were for Dr. John S. Turner and Dr. M. B. Grace, on a charge of disturbing the peace and dignity of the State by snoring so loud nobody could sleep, at the Westbrook Hotel, between the hours of 2 and 7 a. m.; another warrant was for the bodies of Drs. John T. Moore and Marvin L. Graves, dead or alive, to answer the city of Fort Worth and the State of Texas on the charge of being drunk on duty between 1 and 3 a. m., against the peace and dignity of the State Medical Association of Texas. On this warrant bail was assessed at the sum of ten thousand dollars. The third warrant was for Dr. Frank D. Boyd, on the most serious charge of negligent homicide—killing Father Time. In this instance the bail was set at one hundred thousand dollars.

There being no further business, the General Meeting adjourned.

THE HOUSE OF DELEGATES.

EVENING SESSION.

The House was called to order at 4 p. m., by President Dr. Moody.

The Secretary read the second report of the Reference Committee on Resolutions and Memorials, as follows:

Second Report of the Reference Committee on Resolutions and Memorials.

Your committee begs to submit this supplementary report, covering matters referred to us since our first report:

We recommend that the following resolutions, introduced by Dr. A. W. Carnes, be not passed:

Resolutions on Relationship of Hospitals and Visiting Staffs—A. W. Carnes.

Resolved, That the State Medical Association endorse heartily the action of twenty-six members of the Staff of St. Paul's Sanitarium in resigning recently from that institution, and further commend them for their efforts individually and collectively, to maintain the high standard of medical ethics set for them by the American Medical Association and the various minor medical associations throughout the country.

Resolved, That the editorial appearing in the February number of the Texas State Journal of Medicine, entitled, "The Responsibility of the Staff in the Management of a Hospital," be highly commended; believing that it is a full, succinct expression of the relationship that should exist between the hospital and the medical profession.

We do not believe the following resolution regarding the use of alcohol is either appropriate for the occasion or in proper form for consideration by a scientific body, and therefore recommend that it do not pass:

Resolution on the Use of Alcohol as a Medicine.

Whereas, The best authorities scientifically recognize the fact that alcohol is not necessary for the best results in medicine, therefore be it

Resolved, By the State Medical Association of Texas, that its use as a medicine be condemned.

We desire to separate the following resolutions from the State Association of County Secretaries, into three parts, and to recommend that the part calling for a joint session with the House of Delegates be not passed, because of the fact that the House never has sufficient time to attend to the necessary and routine affairs of the Association proper.

We recommend that that part referring to the matter of record keeping by county societies be referred to the Board of Councilors.

We recommend that the suggestion that county societies be authorized to elect their secretaries for terms of two years, be not passed.

The resolutions follow:

Resolutions from the State Association of County Secretaries.

Resolved, That, in behalf of the general interest of the State Association and as being conducive to more effectiveness of this Association, we ask the House of Delegates to inaugurate a custom of holding a joint session at each annual meeting, the House of Delegates and the State Association of County Secretaries. Be it further

Resolved, That, in view of the lax manner in which County Society Records are now kept, the House of Delegates adopt some plan whereby a uniform system of bookkeeping may be inaugurated.

We further recommend that a plan be formulated whereby the Constitution and By-Laws regulating County Societies may be altered to permit societies to elect their secretaries for terms of two years, in place of one year as now obtains.

It is the pleasant duty of your committee to commend most heartily the following resolutions of thanks to those who have labored so hard and so successfully to make our visit to Fort Worth on this

occasion one long to be remembered, and we recommend that they be adopted by a rising vote, and that the Secretary notify in an appropriate manner all concerned. The resolutions follow:

RESOLUTION OF THANKS.

Be it Resolved, That the State Medical Association of Texas, in regular session assembled, extend a vote of thanks and appreciation to the Tarrant County Medical Society for the splendid arrangement made for our accommodation and the most enjoyable and unique entertainment extended during our session; to the ladies and citizens generally, for their wholesome and pleasing hospitality; to the Chamber of Commerce for the use of their splendid building for the purposes of session; to the First Baptist Church and the Congregation of Temple Beth El, for the use of their respective buildings for our scientific section meetings; to the scientific and commercial exhibitors for their interesting and profitable exhibits; to Miss Chase and her assistants for the most elaborate and enjoyable music on the occasion of our Memorial Exercises, and to the officials of the city and the lay press for the pleasing episodes arranged for our entertainment, all of which will conspire to make our visit to Fort Worth on the occasion of our forty-ninth annual session, long to be remembered.

C. C. GIDNEY.
J. ALLEN KYLE.
P. C. COLEMAN.

Respectfully submitted,
E. F. COOKE, Chairman.
CHAS. D. DIXON.
E. E. DICKASON.

Motion was made and duly seconded, that the report be adopted.

Dr. W. P. Coyle of Orange, moved to amend the motion to the extent that the House adopt the report of the committee and the recommendations, with the exception of that portion rejecting the passage of the Carnes resolution.

Dr. M. M. Carrick of Dallas, moved to table the amendment, which motion, upon being seconded, carried.

The motion to adopt the report of the committee prevailed.

DR. J. S. TURNER of Dallas read the final report of the Reference Committee on Amendments to the Constitution and By-Laws, as follows:

SECOND REPORT OF THE REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS.

One additional suggestion for amendment to the By-Laws has come into our hands since our report of yesterday. Dr. Walter Shropshire proposes to amend Section 6 of Chapter VIII, by adding to line 4, after the word "read," the following: "and shall be published in full with as much of the discussion as can be obtained; provided, that nothing in them will subject the Association to libel suit, or the language or sentiment of same is not offensive to the Association."

This amendment could not possibly be adopted at this session, and we return it to the House, with the suggestion that it be reintroduced next year for attention while there is time to act.

Respectfully,
J. S. TURNER, Chairman.

On motion, the report was adopted.

Dr. M. B. Grace of Seguin, read a supplementary report from the Reference Committee on Reports of Officers and Committees, as follows:

SECOND REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS AND COMMITTEES.

The Trustees have asked authority to accomplish certain contracts with indemnity insurance companies, as recommended by the Council on Medical Defense, and we recommend that this authority be specifically granted.

We recommend that the report of the Insurance Committee be received and adopted, and that the committee be commended for its efforts in the interest of a standard fee and a standard service, in life insurance examinations. We further recommend that the committee be continued.

Finally, we beg to recommend that the President and Secretary be especially commended for the successful year of their administration just passed, it being recognized that their efforts have very largely contributed to the most excellent financial and general condition of the Association, and to the success of the splendid session just closing.

Respectfully submitted,
M. B. GRACE, Chairman;
J. ALLEN KYLE.

On motion the report was adopted as read.

There being no further business, the House of Delegates adjourned *sine die.*

MISCELLANEOUS.

MASTOIDITIS—PERISINOUS ABSCESS. OPERATION AND RECOVERY.

To the Editor: I desire to report this case because of its many points of interest to otologists. In the first place, it presented a typical book-picture of acute mastoiditis; and was so diagnosed by myself as well as by the general surgeon, who consulted me. Again, the immediate relationship of tonsils and adenoids in this case (as in every similar case) can be so definitely traced. Finally, the brilliant results of a prompt and properly performed operation in such conditions is beautifully illustrated.

About four weeks before he came to me the patient, Master M., complained of a severe ache in the right ear, which after three days discharged a large amount of yellow muco-pus. This discharge continued more or less until the day before I saw him, April 10, when it ceased completely. The parents were very sure that all the trouble started with a bad "cold in the head." At the time of my examination the ear was standing out from the head on account of the great swelling of the tissues over the mastoid. On account of the clear-cut history and the local appearances, the attending surgeon had already made a diagnosis of acute mastoditis, in which I at once concurred. I did not even make an examination of the membrana tympani because it did not seem at all necessary. The mastoid region was tender and red. The patient was sent at once to the hospital for operation.

The usual incision was made down to the bone. No pus was found in the soft parts, although a subperiosteal abscess was suspected. The soft tissues were slightly brawny and edematous. The mastoid was flat and showed no evidence of disease. No pus was found in the cells, and, indeed, there was little evidence of disease of any kind. The bone was of the diploetic type. A small amount of pus was noted in the mastoid antrum. I was peculiarly astonished at not finding more mastoid involvement. There was a distinct area of granulations and bleeding well back over the lateral sinus region, and this bleeding was followed up closely, when all at once, after removing the bone over the knee of the sinus, about a drachm of thick, creamy pus welled up into the wound. Altogether an area of bone ¾ by ½ inch was removed from over the sinus, from the knee downwards. The pus was forced out in pulsations. Bone was taken away until healthy granulations were found. The route of the infection was evidently directly from the antrum along a suture which could be easily seen at the bottom of the excavation and leading backward toward the sinus knee. This

was probably the petromastoid or squamomastoid suture.

The temperature, which had been 103½° F. before operation, dropped to 99° F. the following day, and to normal on the second day, never rising above normal afterward. The wound healed perfectly and the bandage was discontinued in four weeks.

A point of great import in this and all mastoid work, is that the tonsils and adenoids should be removed early. If removed in this case, before the "bad cold in the head" came on, there would have been no perisinous abscess to call for operation. Where, however, the mastoid has become diseased, it is the best plan to remove the tonsils and adenoids before the case leaves the hospital. I have removed these growths at the time of the mastoid operation, with excellent results. Again, if I can secure permission, I remove these growths (organs, glands or whatever they are,) whenever a child is brought for paracentesis in acute suppuration of the middle ear. In the present case, the child was too sick to add the tonsil and adenoid operation to his other troubles. In this case, to prove my point, a slight acute involvement of the other ear has supervened since the operation, and because the parents were slow in deciding about removal of the above mentioned growths. At present, the patient has been sent to the country, the parents not knowing that the tonsil and adenoid operation would be worth far more to him than a summer vacation in the country. If the time ever comes when not only the general public but physicians themselves are thoroughly educated on this one point, a near-ideal will have been attained. These growths will be universally removed between the ages of three and five years; and the mastoid operator, the intubator, the "catarrh" doctor, and even the dentist, will be compelled to look for new fields to conquer.

H. B. Decherd, A. M., M. D.

Dallas, Texas, October 1, 1914.

AN IMPORTANT RULING ON THE HARRISON LAW.

Since the Harrison law went into force, frequent inquiries have been made as to the quantity of drugs which a physician was justified in prescribing or dispensing. Obviously, the quantity necessary in chronic cases or in the treatment of drug habitués differs materially from the quantity permissible in an ordinary case. The law makes no provision on this point, except to provide in general terms that, whether prescribing or dispensing, all acts coming under the scope of the law must be in good faith and not to evade the purposes of the act. It has been evident that some supplementary ruling on this point would be necessary. The Commissioner of Internal Revenue has just issued a ruling, dated May 11, which provides that

"where a physician, dentist, or veterinarian prescribes any of the aforesaid drugs (those included in the provisions of the Harrison law) in a quantity more than is apparently necessary to meet the immediate needs of a patient in the ordinary case, or where it is for the treatment of an addict or habitué to effect a cure, or for a patient suffering from an incurable or chronic disease, such physician, dentist, or veterinary surgeon should indicate on the prescription the purpose for which the unusual quantity of the drug so prescribed is to be used. In cases of treatment of addicts, the prescriptions should show the good faith of the physician in the legitimate practice of his profession by a decreasing dosage or reduction of the quantity prescribed from time to time, while on the other hand in cases of chronic or incurable diseases, such prescriptions might show an ascending dosage or increased quantity. Registered dealers filling such prescriptions should assure themselves that the drugs are prescribed in good faith for the purpose indicated thereon, and if there is reason to suspect that the prescriptions are written for the purpose of evading the intentions of the law, such dealers should refuse to fill same."

Under this ruling, physicians must place on their prescriptions, whenever, for any reason, an unusual quantity of opium or cocain is prescribed, a statement of the reasons for such an order. If the physician and patient are acting in good faith, it is difficult to see any objection to such provision. There will, of course, be some sensitiveness on the part of secret drug addicts to having their weaknesses made a matter of record, but this can hardly be avoided in any plan which will separate the genuine from the spurious demand for these drugs. The ruling of the Commissioner will clear up a point on which there has been much discussion. As *The Journal* has constantly stated, the object of the Harrison law is to secure publicity in the use of the habit forming drugs and to effect the prosecution and punishment of all persons using them for illegitimate purposes. Compliance with this ruling will relieve physicians of responsibility and will make the prescribing or dispensing of unusual amounts of these drugs a matter of record. *Jour. A. M. A.*

EAST TEXAS DISTRICT SOCIETY NOTICE.

The Editor: Will you please announce in the June issue of the Journal that there will be a meeting of the Eleventh District Medical Society at Palestine, June 24th, for the purpose of reorganizing same?

An interesting program will be arranged and every member in the Eleventh District is urgently requested to be present, and any others who can come will be welcome.

Fraternally yours,

C. C. Nash,

Councilor Eleventh District.

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1914, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

Alcresta Ipecac Tablets.—Tablets containing an absorption product of ipecac alkaloids and Fuller's earth, each tablet representing 10 grs. of ipecac. The ipecac absorption product is said to pass the stomach unchanged but to be decomposed in the intestine with liberation of the ipecac alkaloids and thus to exert the amebacidal action of ipecac in the body. Eli Lilly & Co., Indianapolis, Ind. (*Jour. A. M. A.*, Feb. 13, 1915.)

Typhoid Combined Vaccine (Prophylactic).—Marketed in vials and syringes, each package containing three doses. Schieffelin & Co., New York. (*Jour. A. M. A.*, Feb. 20, 1915.)

Cantharidin, Merck.—A non-proprietary preparation of cantharidin. Merck & Co., New York. (*Jour. A. M. A.*, Feb. 20, 1915.)

PROPAGANDA FOR REFORM.

Celerina, Aletris Cordial and Kennedy's Pinus Canadensis, Light and Dark.—As glaring instances of nostrums exploited to physicians on unscientific claims and false representations, the Council on Pharmacy and Chemistry has prepared reports on the products of the Rio Chemical Co., namely, Cele-

rina, Aletris Cordial, Kennedy's Pinus Canadensis, Light or Abican and Kennedy's Pinus Canadensis, Dark or Darpin.

In addition to 42 per cent of alcohol Celerina is stated to contain kola, viburnum, celery, cypripedium, xanthoxylum and aromatics. There is no ingredient in Celerina, except the alcohol, that has any recognizable activity and the alcohol content is nearly as great as that of whiskey. The sooner it is realized that this preparation is essentially nothing but alcohol and bitters exploited under a fancy name, the better for the science of medicine and the public health.

In addition to 28 per cent of alcohol, Aletris Cordial is stated to contain aletris, helonias and scrophularia. These drugs have been discarded as valueless by modern scientific medicine. In Aletris Cordial there is no ingredient capable of producing any other effect than the alcohol stimulation and such psychic effect as may be due to the bitter taste. Yet physicians are asked to believe that "Probably no remedy is so uniformly successful in the prevention of threatened miscarriage as ALETRIS CORDIAL, Rio." Alcohol being the essential constituent of Aletris Cordial and the amount being high enough to promote the formation of the alcohol habit, the recommendation to administer it during pregnancy and to young girls is dangerous and an outrage.

Kennedy's Pinus Canadensis, Dark, recently renamed "Darpin," and Kennedy's Pinus Canadensis, Light, recently renamed "Abican," are of interest chiefly because of the unwarranted claims which are made for them. The "dark" preparation appears to be some sort of a tannin-bearing extract. The "light" preparation appears to be a sulphate of zinc-alum injection. It is devoid of tannin and is not an extract of pinus canadensis as claimed. A discussion of the claims made for these preparations is superfluous. It is enough to mention that they are recommended in such diseases as albuminuria, fetid perspiration, gonorrhea, uterine hemorrhage and leucorrhea. (*Jour. A. M. A.*, Feb. 13, 1915.)

Cod Liver Oil Versus Milk, Butter and Eggs.—Like other fats, cod liver oil is readily digested and utilized in the body. Its disagreeable taste has largely outweighed its availability as a nutrient. Recent experiments have established that the peculiar growth promoting qualities of cod liver oil are likewise possessed by butter and egg-yolk fat. There seems to be no reason, therefore, to administer the unpalatable cod liver oil. (*Jour. A. M. A.*, Feb. 20, 1915.)

Salesthyl and Sal-Hyl.—Salesthyl, a liquid marketed in capsules, is stated to be the menthyl ester of methyl salicylate. Sal-Hyl is stated to be an ointment of Salesthyl, but the exact composition is not disclosed. Salesthyl was submitted to the Council on Pharmacy and Chemistry with the claim that it had the properties of salicylates but to be more efficient. The evidence to substantiate the therapeutic claims was found to be inconclusive and untrustworthy. Being similar to "sal-ethyl," described in N. N. R., the name Salesthyl was held objectionable. The Council refused recognition to these preparations. (*Jour. A. M. A.*, Feb. 20, 1915.)

Cod Liver Oil Cordials.—To determine if the growth promoting principle of cod liver oil is contained in the oilless cod liver oil preparations on the market, feeding experiments have been made with some of these preparations by J. P. Street of the Connecticut Experiment Station. In these experiments it was found that the normal nutrition and growth of rats was not maintained when the fat of a standard ration was replaced by a representative amount of Hagee's Cordial of the Extract of Cod Liver Oil Compound, Vinol, Wampole's Perfected and Tasteless Preparation of an Extract of Cod Liver and Waterbury's Compound, Plain. When, then, these animals were placed on a ration containing an equivalent amount of cod liver oil, normal nutrition and growth were soon established. (*Jour. A. M. A.*, Feb. 20, 1915.)

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

W. H. Hargis, President.....San Antonio.
W. H. Blythe, Vice-President.....Mt. Pleasant.
H. L. Wilder, Secretary-Treasurer.....Glen Rose.

CHANGES OF ADDRESS.

Dr. Eugene Baylis, from Richard to Huntsville.
Dr. Joseph Ponder, from Kemp to Sebree.
Dr. J. E. Sillman, from Palestine to Palo Alto, Cal.
Dr. D. L. Hill, from Temple to Louisville.
Dr. E. W. Jones, from Dodsonvile to Wellington.
Dr. O. O. Gain, from Honey Grove to Dublin.
Dr. W. H. Payne, from Burleson to Kerrville.
Dr. E. J. Ashcroft, from Kingsville to Buffalo.
Dr. W. E. Everitt, from Hamilton to Sterling City.
Dr. P. S. Payne, from Arlington to Dawson.
Dr. C. M. Covington, from Blooming Grove to Inez.
Dr. Lawrence Corley, from Frankston to Midway.
Dr. E. C. Price, from Tolar to Capitan, N. M.
Dr. J. W. Brown, from Fort Worth to Mineral Wells.
Dr. W. E. Herrin, from Heath to San Angelo.
Dr. C. V. Bomar, from Chicago to Cross Plains.
Dr. G. H. Griffin, from Milford to Negley.
Dr. T. S. Littlejohn, from Marshall to El Paso.
Dr. C. W. Skipper, from Brownsville to Westville.

MINUTES, ANNUAL MEETING STATE ASSOCIATION OF COUNTY SECRETARIES.

The State Association of County Secretaries met in regular annual session in Fort Worth, May 6th, 1915, at 9 a. m., First Baptist Church, with President Dr. F. G. Sanders in the chair.

On motion an invitation was extended the House of Delegates and the Councilors to meet with the State Association of County Secretaries for a period of one hour at some convenient time during the day, and Drs. Wilder and Hargis were appointed a committee to extend the invitation.

The committee reported that it had extended the invitation in writing, but that the House of Delegates was too busy to accept the same.

The minutes of the previous meeting were read and adopted.

The Chairman delivered his annual address, after which the Secretary read his report. Both were received and filed.

Upon motion, Drs. L. H. Reeves, W. H. Blythe and F. C. Braden were appointed a committee to draft resolutions requesting the House of Delegates and the Board of Councilors to recognize the requirements of the Secretaries, and make certain changes in the by-laws relating thereto.

On motion, Drs. L. H. Reeves, W. H. Hargis and H. L. Wilder, were appointed a committee to revise the Constitution and By-Laws of the State Association of County Secretaries.

The regular program was taken up, and the following papers read:

Elimination of Advertising in County Societies, by W. H. Hargis; discussed by Drs. Wilbanks, Davisson, Davis, Reeves, Watts, Anderson and Sanders. *Some Important Factors in Society Administration*, by Dr. L. H. Reeves; discussed by Drs. Hargis, Braden, Davis, Davisson, and Richardson. *Some of the Causes of Non-Payment of Dues*, by Dr. E. F. Gough; discussed by Drs. Davis, Spangler, Braden, Wilbanks, Richardson, Anderson, and Wilder. *Methods of Compelling Attendance on County*

Society Meetings, by Dr. M. L. Wilbanks; discussed by Drs. Braden, Hammond, Watts, Blythe, Davis, Gough, Hargis, Spangler, and Richardson. *A Letter to Secretaries*, by Dr. W. H. Blythe; discussed by Drs. Wilbanks and Reeves. *What Should Appear in the Minutes*, by Dr. R. Loving; discussed by Drs. Hargis, Wilder and Braden. *Co-operation of the Councilor and State Association of County Secretaries*, by Dr. A. C. Scott; discussed by Drs. Phenix, Ball, Loving, and Reeves. *Some Practical Ideas with Reference to Society Work*, by Dr. J. J. Crume.

The committee appointed to present resolutions to the House of Delegates favoring certain changes in the State Medical and County Society by-laws, and close co-operation between the House of Delegates, the Board of Councilors, and the State Association of County Secretaries, reported that they had presented such resolution, and that the House of Delegates had refused to attempt a joint session; that the matter of uniform bookkeeping by county secretaries was referred to the Board of Councilors, and that the proposition to elect secretaries of county societies for a period of two years was not approved, for the reason that some difficulty might be experienced in getting rid of a sorry secretary.

On motion, it was declared the sense of the body that the House of Delegates should hold a meeting before the regular program of the annual session was undertaken, and that county secretaries undertake to engender sentiment in their societies in favor of this proposition.

The following officers were elected:

President, Dr. W. H. Hargis of San Antonio; Vice-President, Dr. W. H. Blythe of Mt. Pleasant; Secretary-Treasurer, Dr. H. L. Wilder of Glen Rose.

BOOK NOTES

A Text-Book of the Practice of Medicine. For Students and Practitioners. By Hobart Amory Hare, B. Sc., M. D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia; Physician to the Jefferson Medical College Hospital; one-time Clinical Professor of Diseases of Children in the University of Pennsylvania. Third edition revised and enlarged. Imperial octavo, 969 pages, with 142 engravings and 16 plates in colors and monochrome. Cloth, $6 net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

This edition of Hare's Practice of Medicine transcends all former efforts of the author. He evidently had a clear view of what the subscriber would most relish in a book of this character. It meets most promptly the commonplace requirements of every-day problems in the busy life of bedside practice. We can commend the book to the man in need of ready, authentic reference.

The plan of the work assures the essential value of the material it brings to the doctor. It is distinct, clear and forceful in style, and in the revision down-to-date matter has been given the right of way; and so much has been eliminated that it has practically been rewritten. In fact, whole new sections have been added to take the places of effete matter, and to take the space made necessary by a phenomenal advance in the hitherto speculative but now assuredly established knowledge. Rational throughout, it has adapted the strictest modern methods of the laboratorian in the study of pathologic processes, and has brought to the every-day doctor the most scientific methods of great clinicians.

In no volume of this type have we found the interests of the subscriber more faithfully kept in view. The volume is well built physically, and the material is first class; just such work as should be expected from the publishers.

Nervous and Mental Diseases. By Archibald Church, M. D., Professor of Nervous and Mental Diseases in Northwestern University Medical School, Chicago; and Frederick Peterson, M. D., formerly Professor of Psychiatry, Columbia University. Eighth edition, revised. Octavo volume of 940 pages, with 350 illustrations. Philadelphia and London. W. B. Saunders Company, 1914. Cloth, $5.00 net; Half Morocco, $6.50 net.

This is one of the best text-books on nervous and mental diseases that it has been the pleasure of this reviewer to examine. It has for years been our reliance clinically, and in medico-legal matters. Some new matter has been added to the text in this (eighth) edition, including the advanced studies of Barany in the subject of verigo and its labyrinthine relations, in the discussion of the diseases of the vesticular portion of the eighth nerve. Much new material has been added to the discussion of infantile paralysis, and on the subject of syphilis such matter as has proven enlightening and beneficial in the diagnosis of its protean manifestations and the epoch-making therapy of this disease, has been included. About all that has been brought to light by the recent investigations of the spinal fluid in its relation to diseases of the brain and spinal cord has also been added, and the entire field of glandular and internal secretions has been carefully gone over. Tetany is defined among the diseases of the nervous system, and associated with glandular disorders.

This long highly esteemed work will continue to hold a firm grip on the student, as well as the teaching and practicing members of the profession; and great credit is due to the authors and publishers for the revision.

Cystoscopy and Urethroscopy for General Practitioners. By Bransford Lewis, B. S., M. D., F. A. C. S., Professor of Genito-Urinary Surgery, Medical Department of St. Louis University, St. Louis, Missouri; Genito-Urinary Surgeon to John's Hospital, etc., and Ernest G. Mark, A. B., M. D., F. A. C. S., Professor Genito-Urinary and Venereal Diseases in the University Medical College, Kansas City, Missouri, etc., with a chapter by William F. Braasch, M. D., Attending Physician to the Mayo Clinic, Rochester, Minnesota. Octavo. Cloth, 238 pages, with 113 illustrations, 23 printed in colors. P. Blakiston's Son & Company, 1012 Walnut street, Philadelphia, 1915.

This is the newest book upon a subject that has made such rapid progress lately that the several splendid works appearing from time to time, always leave something to be said. It is accurate and up-to-date. Devoted to the practical side, rather than to theories, it leads to the very thing the student is most anxious to know about the subject, and establishes in his mind clearly and distinctly the procedure to be followed in any given situation. The diction is terse, technic simplified, and the purpose of the writer made plain to the reader with apt, new illustrations, at times showing what might not otherwise be made clear by the use of so many words. The book is what its title indicates, a plain, straightforward discussion of cystoscopy and urethroscopy, bringing to the intelligent practitioner what has been heretofore accessible only to the post-graduate scholars of the schools and clinics of Europe.

MEMBERSHIP OF

STATE MEDICAL ASSOCIATION OF TEXAS

MAY 20, 1915

MEMBERSHIP

STATE MEDICAL ASSOCIATION OF TEXAS

May 20, 1915

No. 1. El Paso District, composed of the following counties: Brewster, El Paso, Jeff Davis, Loving, Pecos, Presidio, Reeves, Terrell, Ward and Winkler.

No. 2. Big Springs District, embracing the following counties: Andrews, Borden, Cochran, Crane, Dawson, Dickens, Ector, Fisher, Gaines, Garza, Glasscock, Haskell, Howard, Hockley, Jones, Kent, King, Knox, Lynn, Martin, Midland, Mitchell, Nolan, Scurry, Stonewall, Taylor, Terry, Upton and Yoakum.

No. 3. Panhandle District, embracing the following counties: Armstrong, Bailey, Briscoe, Castro, Carson, Cottle, Childress, Collingsworth, Crosby, Deaf Smith, Dallam, Donley, Floyd, Foard, Gray, Hale, Hall, Hardeman, Hemphill, Hutchison, Hansford, Hartley, Lamb, Lipscomb, Lubbock, Motley, Moore, Ochiltree, Oldham, Parmer, Randall, Roberts, Sherman, Swisher, Wheeler, Wichita and Wilbarger.

No. 4. San Angelo District, embracing the following counties: Brown, Coke, Concho, Crockett, Coleman, Irion, Kimble, Lampasas, Menard, Mills, McCulloch, Runnels, Schleicher, Sterling, Sutton and Tom Green.

No. 5. San Antonio District, embracing the following counties: Atascosa, Bandera, Bexar, Comal, Dimmit, Edwards, Frio, Gaudalupe, Gillespie, Gonzales, Karnes, Kendall, Kerr, Kinney, La Salle, Maverick, Medina, Uvalde, Val Verde, Wilson and Zavala.

No. 6. Corpus Christi District, embracing the following counties: Aransas, Bee, Cameron, Duval, Encinal, Hidalgo, Live Oak, McMullen, Nueces, Refugio, San Patricio, Starr, Webb and Zapata.

No. 7. Austin District, embracing the following counties: Bastrop, Blanco, Burnet, Caldwell, Hays, Lee, Llano, Mason, San Saba, Travis and Williamson.

No. 8. De Witt District, embracing the following counties: Calhoun, Colorado, De Witt, Fayette, Goliad, Jackson, Lavaca, Matagorda, Victoria and Wharton.

No. 9. Southern District, embracing the following counties: Austin, Brazoria, Brazos, Burleson, Fort Bend, Galveston, Grimes, Harris, Madison, Montgomery, Waller, Walker and Washington.

No. 10. Southeastern District, embracing the following counties: Nacogdoches, Chambers, Hardin, Jefferson, Jasper, Liberty, Newton, Orange, Polk, Sabine, San Augustine, San Jacinto, Shelby and Tyler.

No. 11. Eastern District, embracing the following counties: Anderson, Cherokee, Freestone, Henderson, Houston, Leon, Angelina, Panola, Rusk, Smith and Trinity.

No. 12. Central District, embracing the following counties: Bell, Bosque, Comanche, Coryell, Erath, Falls, Hamilton, Hill, Hood, Johnson, Limestone, Milam, McLennan, Navarro and Robertson.

No. 13. Northwestern District, embracing the following counties: Archer, Baylor, Callahan, Clay, Eastland, Jack, Palo Pinto, Parker, Shackelford, Stephens, Throckmorton and Young.

No. 14. Northern District, embracing the following counties: Collin, Cooke, Dallas, Delta, Denton, Ellis, Fannin, Grayson, Hopkins, Hunt, Kaufman, Lamar, Montague, Rains, Rockwall, Somervell, Tarrant, Van Zandt and Wise.

No. 15. Northeastern District, embracing the following counties: Bowie, Camp, Cass, Franklin, Gregg, Harrison, Marion, Morris, Red River, Titus, Upshur and Wood

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FIRST OR EL PASO DISTRICT.

Dr. F. P. Miller, El Paso, Councilor.

EL PASO COUNTY MEDICAL SOCIETY.

Anderson, W. H., El Paso.
Auerbach, L. B., El Paso.
Bishop, I. E., El Paso.
*Braden, C. F., (Sec.), El Paso.
Branch, W. M., El Paso.
Brown, C. P., El Paso.
*Brown, W. L., El Paso.
Brunner, Geo., El Paso.
Bush, I. J., El Paso.
*Carpenter, E. R., El Paso.
Cathcart, J. W., El Paso.
Clutter, B. F., El Paso.
Craige, Branch, El Paso.
Crouse, H. W., El Paso.
Darnall, H. O., El Paso.
Darracott, J. C., Marfa.
Deady, H. P., El Paso.
Detwiler, D. W., El Paso.
Frazin, N. D., El Paso.
Freedman, A. A., El Paso.
Gallagher, Paul, El Paso.
Gallagher, F. W., Los Angeles, California.
Garrett, F. D., El Paso.
Grace, T. W., El Paso.
Gray, J. B., El Paso.
Haffner, S. M., El Paso.
Hendricks, C. M., El Paso.
Hill, Mattie I., El Paso.
Homan, R. B., El Paso.
Huffaker, D. H., El Paso.
Hunter, J. R., El Paso.
Irvin, E. H., El Paso.
Jackson, H. V., El Paso.
Jamieson, W. R., El Paso.
Jones, W. T., Ft. Davis.
Keltner, J. E., El Paso.
King, S. F., El Paso.
Kluttz, W. C., El Paso.
Love, J. D., El Paso.
Lynch, F. W., El Paso.
McCamant, T. J., El Paso.
McKnight, J. L., El Paso.
McNeil, Irving, El Paso.
Middlebrook, J. R., Alpine.
*Miller, F. P., El Paso.
Morford, J. H., El Paso.
Pickels, W. H., El Paso.
Pickett, J. A., El Paso.
Prentiss, E. C., El Paso.
*Ramey, R. L., El Paso.
Rawlings, J. A., El Paso.
Reinemund, C. A., El Paso.
Richmond, J. M., El Paso.
Roasberry, E. A., Van Horn.
Rodarte, D., El Paso.
Rogers, E. B., El Paso.
Safford, H. T., El Paso.
Saxton, C. B., El Paso.
*Schuster, M. P., El Paso.
*Smith, W. R., El Paso.
Stadelman, E., Long Beach, Cal.
Stark, H. H., El Paso.
Stevens, B. F., El Paso.
Stevenson, H. E., El Paso.
Strong, E. D., El Paso.
Tappan, J. W., El Paso.
Thomas, G. N., El Paso.
Thompson, H., El Paso.
Turner, S. T., El Paso.
Urmston, W. B., El Paso.
Vance, Jas., (Pres.), El Paso.
Vinsant, W. J., San Benito.
Weish, M., Karnes City.
Werley, G., El Paso.
Wesson, M. B., El Paso.
White, E. S., Ysleta.
White, H. S., El Paso.
White, A. H., Shafter.
Witherspoon, L. G., El Paso.
Worsham, B. M., El Paso.
Wright, M. O., El Paso.

REEVES-WARD-PECOS COUNTY MEDICAL SOCIETY.

Baker, W. E., Grandfalls.
Black, W. D., (Sec.), Barstow.
Bryan, O. J., Pecos.

Camp, Jim, Pecos.
Lusk, H. N., Toyah.
Mayhugh, I., Barstow.
Moore, J. W., Pecos.
Wilson, R. G., Odessa.

SECOND OR BIG SPRINGS DISTRICT.

Dr. N. J. Phenix, Colorado, Councilor.

ECTOR - MIDLAND - MARTIN - HOWARD COUNTY MEDICAL SOCIETY.

Barnett, W. C., Big Springs.
Brown, L. C., Stanton.
Cain, S. G., Big Springs.
Campbell, M. E., Big Springs.
Collins, T. M., Coahoma.
Haley, J. T., Midland.
*Hall, G. T., Big Springs.
Hurt, J. H., Big Springs.
Johnson, W. F., (Sec.), Big Springs.
*Lee, W. A., Garden City.
Thomas, J. B., Midland.
*Wilson, R. A., Odessa.
Wright, J. G., Big Springs.

FISHER-STONEWALL COUNTY MEDICAL SOCIETY.

*Allen, R. R., Roby.
Barlow, J. R., Roby.
Bynum, J. T., McCauley.
*Callan, W. W., Rotan.
*Grimes, R. I., (Sec.), Sylvester.
Hambright, J. G., Roby.
Reaves, B. F., Rotan.
*Sartor, E. R., Rotan.

JONES COUNTY MEDICAL SOCIETY.

Adamson, F. R., Anson.
*Bickley, N. H., Stamford.
*Bunkley, E. P., Stamford.
Bunkley, Wm., Stamford.
*Davis, J. D., Austin.
*Hudson, F. E., Anson.
Jones, A. McK. (Sec.), Anson.
*Jones, T. A., Stamford.
McGee, B. B., Swenson.
McKinney, E. P., Stamford.
*McReynolds, A. D., Stamford.
Shapard, R. R., Anson.
Sledge, J. R., Stamford.
Smith, N. J., (Pres.), Hamlin.
Southard, D., Stamford.
Standifer, T. E., Spur.
Stephens, D. L., Anson.
White, D., Hamlin.
*Williams, D., Anson.

KNOX-HASKELL COUNTY MEDICAL SOCIETY.

Cummins, D. L., Haskell.
*Dunn, W. H., Rochester.
*Edwards, T. S., (Pres.), Knox City.
*Farrington, W. P., Munday.
*Hammond, J. E., (Sec.), Munday.
*Hart, M. M., Vera.
Kimbrough, W. A., Haskell.
McDonald, N. F., Blackwell.
Miller, W. T., Rochester.
Payne, W. E., O'Brien.
Pope, Wm. P., Knox City.
Robertson, J. B., Munday.
*Rogers, M. W., Rule.
Smith, A. A., Munday.
Taylor, L. F., Haskell.
Weaver, H. C., Rule.

MITCHELL-NOLAN COUNTY MEDICAL SOCIETY.

*Burk, W. E., Sweetwater.
Butler, W. H., Westbrook.
Campbell, J. F., Blackwell.
*Chapman, A. A., Sweetwater.
*Coleman, P. C., Colorado.
Copeland, W. M., Loraine.
Copeland, C. A., Loraine.
Dudgeon, L. [illegible], (Pres.), Sweetwater.
Griffin, Q. A., Sweetwater.
Latham, J. B., Blackwell.
Long, Newt, Sweetwater.
Loveless, J. C., Lamesa.
Martin, T. A., Lorain.
*Phenix, N. J., Colorado.
Ratliff, T. J., (Sec.), Colorado.
Risinger, J. T., Hylton.
Root, C. L., Colorado.
Rosebrough, C. A., Sweetwater.
Scott, H. C., Sweetwater.
*Young, J. W., Roscoe.

SCURRY-KENT-DICKENS COUNTY MEDICAL SOCIETY.

*Bannister, J. M., (Sec.), Snyder.
*Collins, J. A., Post.
Holder, T. D., Hermleigh.
*Howell, R. L., Snyder.
*Johnson, W. R., Snyder.
*Lane, J. O., Fluvanna.
*Leslie, A. C., Snyder.
Merrell, W. C., Ira.
Morrow, W. H., Dunn.
Palmer, W. A., Dunn.
Ponton, A. R., Post.
Rosser, H. E., Snyder.
Scarborough, A. O., Snyder.
Surmann, A. C., Post.
*Trigg, L. E., (Pres.), Hermleigh.
Warren, J. W., Snyder.
Whitmore, J. T., Snyder.
Williams, D. C., Post.

TAYLOR COUNTY MEDICAL SOCIETY.

Alexander, J. M., Abilene.
Alexander, S. M., Abilene.
*Armstrong, M., Merkel.
*Bailey, J. H., Clyde.
Barnett, W. H., Abilene.
*Bass, T. B., Abilene.
*Brown, A. S., (Pres.) Abilene.
*Carrick, M. M., Dallas.
Cash, W. A. V., Abilene.
Cates, S. R., Abilene.
Crawford, M. V., Merkel.
Daly, Jas. M., Abilene.
Davis, A. E., Abilene.
*Estes, J. M., Abilene.
Fuller, M. L., Bradshaw.
Haynes, F. E., Abilene.
*Hollis, L. W., Jr., Abilene.
Hollis, L. W., Abilene.
Howser, J. P., Abilene.
Looney, A. D., Oplin.
Magee, J. D., Abilene.
Mathews, W. J., Abilene.
Pickard, L. J., (Sec.), Abilene.
*Pope, A. J., Abilene.
Sandefer, G. H., Abilene.
Townsend, J. G., Tuscola.
Wallace, H. E., Ovalo.
Warnicke, J. H., Abilene.

THIRD OR PANHANDLE DISTRICT.

Dr. W. C. Dickey, Memphis, Councilor.

CHILDRESS COUNTY MEDICAL SOCIETY.

*Albert, J. W., Childress.
*Barnes, H. D., Childress.
*Bryan, F. B., (Sec.), Childress.
*Harrell, J. F., Kirkland.
Jernigan, J. H., Childress.
*McFerran, R. W., Childress.
McGowan, E. E., Paducah.
*Michie, J. D., Childress.
*Snyder, J. W., Childress.
*Wolford, R. B., (Pres.), Childress.

COLLINGSWORTH COUNTY MEDICAL SOCIETY.

Beck, Edward J., Quail.
Cross, John G., Wellington.
*Jones, E. W., Dodsonville.
Loving, Joseph H., (Pres.), Wellington.
Moss, Edw. W., Quail.
Pittman, Joseph J., Wellington.
Spickard, Bennie U., Plymouth.
*Street, Samuel A., Wellington.
*Worley, Harvey B., (Sec.), Wellington.

DONLEY COUNTY MEDICAL SOCIETY.

Carroll, T. W., Clarendon.
Ellis, T. H., (Sec.), Clarendon.
Gray, Wm., Clarendon.
*Hamm, E. F., Clarendon.
*Jenkins, B. L., Clarendon.
Stocking, J. D., (Pres.), Clarendon.

FOARD COUNTY MEDICAL SOCIETY.

Cantrell, C. A., Truscott.
Cherry, Thos., Margarett.
*Clark, Hines, (Pres.), Crowell.
Hill, J. M., Crowell.
*Kincaid, R. L., (Sec.), Crowell.
*Main, R. E., Thalia.

HALE-SWISHER COUNTY MEDICAL SOCIETY.

Anderson, J. C., Plainview.
*Gidney, C. C., Plainview.
*Gilliam, H. A., Lamesa.
Guyton, J. V., Plainview.
Hanby, J. D., Plainview.
Judkins, O. H., Austin.
Lindsay, H. A., Plainview.
McClendon, E. F., (Sec.), Plainview.
McElroy, F. Q., Happy.
Nichols, O. E., Plainview.
Owens, J. F., Plainview.
Pickett, James, (Pres.), Plainview.
Sanders, R. W., Hale Center.
Underwood, S. J., Hale Center.

Wayland, L. C., Plainview.
Wayland, J. H., Plainview.

HALL COUNTY MEDICAL SOCIETY.

*Ballew, J. M., Memphis.
*Clark, V. V., Estelline.
*Dickey, W. C., Memphis.
Durham, J. Q., Memphis.
Gilmore, Howard, Turkey.
Greenwood, J. W., Memphis.
*Johnson, A. L., Newlin.
Mayes, W. C., (Sec.), Memphis.
*Miller, W. S., Estelline.
*Stidham, C. Z., Lake View.
*Vardy, P. L., Estelline.
Wilson, C. F., Memphis.
*Wilson, W., Memphis.

HARDEMAN COUNTY MEDICAL SOCIETY.

Ball, A. J., Quanah.
Carter, G. W., Quanah.
Dillard, B. A., Chillicothe.
*Frizzell, T. D., (Sec.), Quanah.
Green, J. A., Roaring Springs.
*Hanna, J. J., (Pres.), Quanah.
Harper, J. W., Paducah.
Harris, B. A., Odell.
*Horton, J. T., Quanah.
*Johnson, G. H., Quanah.
Jones, C. B., Quanah.
Lowery, T. A., Chillicothe.
McCullough, J. T., Quanah.
*McDaniel, R. R., Quanah.
Radford, G. W., Quanah.
Stone, Frank, Dumont.
Terry, S. D., Goodlet.
*Webb, E. M., Chillicothe.
Westbrook, T. H., Archer City.
Wilkins, J. S., Paducah.
Wilkins, T. O., Paducah.
Young, T. M., Chillicothe.

HEMPHILL - ROBERTS - LIPSCOMB-OCHILTREE COUNTY MEDICAL SOCIETY.

Alhman, Alfred, San Marcos.
Caylor, H. C., (Sec.), Canadian.
Cole, Archie, Mobeetie.
Davis, J. J., Higgins.
Kelley, J. H., Miami.
Lee, S. C., Glazier.
Newman, A. M., (Pres.), Canadian.
Snyder, E. H., Canadian.

LUBBOCK - CROSBY COUNTY MEDICAL SOCIETY.

Adams, L. H., Slaton.
*Baugh, W. L., (Pres.), Lubbock.
Clayton, Chas., Lubbock.
Hall, R. J., Lubbock.
*Hutchinson, J. T., (Sec.), Lubbock.
Inmon, E. H., Lubbock.
Peebler, O. F., Lubbock.
*Overton, M. C., Lubbock.

POTTER COUNTY MEDICAL SOCIETY.

Barrett, A. E., Pampa.
Brunow, E. V., Pampa.
Carroll, W. A., Claude.
*Crume, J. J., (Sec.), Amarillo.
Donnell, C. E., McLean.
Flamm, W. H., Amarillo.
Gist, R. D., Amarillo.
Hanson, D. T., Amarillo.
Henry, S. M., Groom.
Johnston, E. A., Amarillo.
Killough, R. S., Amarillo.
Lawler, E. T., Amarillo.
Lockett, W. A., Amarillo.
Lumpkin, A. F., Amarillo.
*McClellan, C. L., Farwell.
McMeans, R. L., Amarillo.
Oliver, H. P., Dumas.
Patton, W. D., Amarillo.
Price, W. A., Hereford.
Randall, C. F., Amarillo.
Rasco, I., Amarillo.
Stewart, D. M., Canyon.
*Thomas, G. T., Amarillo.
Vinyard, G. T., Amarillo.
Vinyard, S. P., (Pres.), Amarillo.
Vinyard, R. L., Amarillo.
Walker, R. M., Amarillo.
Wrather, J. R., Amarillo.
York, O., Panhandle.
*Zeigler, B. A., Shamrock.

WICHITA COUNTY MEDICAL SOCIETY.

Amason, L. P., Wichita Falls.
*Beckman, M. A., Wichita Falls.
Bolin, G. W., Charlie.
*Burnside, S. H., Wichita Falls.
Cates, A. C., Petrolia.
*Clark, J. F., Iowa Park.
*Clark, J. F., Jr., Iowa Park.
Coons, L., Wichita Falls.
Creamer, S. E., Electra.
*Daniel, J. E., (Pres.), Wichita Falls.
*Guest, J. C. A., Wichita Falls.
*Hargrave, R. L., Wichita Falls.
Hartsook, Chas. R., Wichita Falls.
Jones, Everett, Wichita Falls.
Lewis, W. H., Burkburnett.
*Lee, Q. B., Wichita Falls.
*Lindley, C. D., Archer City.
*Mackechney, L., Wichita Falls.
McGehee, J. L., Burkburnett.
*Meredith, Duane, Wichita Falls.
*Miller, R. L., Wichita Falls.
Mouser, E. B., Electra.
*Ogden, W. H., Electra.
*Parmley, T. H., Electra.
*Patillo, A. D., Electra.
Reed, A. T., Byers.
Reed, J. F., Wichita Falls.
Rochelle, R. E. L., Burkburnett.
*Russell, I. D., Petrolia.
Smith, R. C., Wichita Falls.
*Stripling, L. F., (Sec.), Wichita Falls.
Swarts, W. W., Wichita Falls.
Walker, M. M., Wichita Falls.
*Walker, Wade H., Wichita Falls.

WILBARGER COUNTY MEDICAL SOCIETY.

*Dodson, James E., Vernon.
*Dodson, James E., Jr., Vernon.
*Flaniken, Barton D., Vernon.
Garland, Alex B., Vernon.
Hix, Richard W., (Sec.), Vernon.
Howard, Abner P., Vernon.
King, James C., Harrold.
King, Thos. A., Harrold.
*Parrish, Minnie O., Vernon.
Rhoads, Henry H., (Pres.), Vernon.
*Reger, Howard, Vernon.
Shanks, Robt. C., Tolbert.

FOURTH OR SAN ANGELO DISTRICT.

Dr. S. C. Parsons, San Angelo, Councilor.

BROWN COUNTY MEDICAL SOCIETY.

Allison, L. P., Brownwood.
Anderson, A. L., Brownwood.
*Anderson, W. B., Brownwood.
*Bowden, A. M., May.
Bowden, H. C., May.
Brown, M. L., Brownwood.
*Campbell, J. M., Goldthwaithe.
Cobble, R. L., Zephyr.
Eargle, H. C., (Sec.), Brownwood.
Fowler, B. A., Brownwood.
*Horn, J. M., Brownwood.
*Howard, E. L., (Pres.), Brownwood.
Hutchison, G. W., Ebony.
Lane, H. G., Blanket.
Locker, H. L., Winchell.
*Locker, S. B., Mercury.
McCarver, J. W., Brownwood.
*McDaniel, H. M., May.
Morris, H. C., Brownwood.
*Morrison, T. A., Grosvenor.
Nichols, J. M., Bangs.
*Nichols, J. N., Bangs.
O'Banion, M. L., Brownwood.
*Rosebrough, F. H., Brownwood.
Scott, M. M., Brownwood.
Sonendriker, E. T., Bangs.
Taylor, A. L., Brownwood.
Wrenn, W. S., Zephyr.
*Yantis, L. R., Blanket.

COLEMAN COUNTY MEDICAL SOCIETY.

Alexander, C. M., (Pres.), Coleman.
Aston, S. N., Coleman.
*Bailey, R., (Sec.), Coleman.
Beaumont, G. B., Coleman.
Biggers, M. A., Silver Valley.
*Cochran, R. H., Coleman.
James, J. W., Talpa.
Mannering, M., Stacy.
Mitchell, H. H., Valera.
Pentacost, J. B., Glen Cove.
Pope, J. G., Coleman.
Sealey, T. R., Santa Anna.
Smith, C. E., Talpa.
Spruiell, S. H., Gould Busk.
*Strozier, W. M., Santa Anna.
Walker, M. G., Coleman.

LAMPASAS COUNTY MEDICAL SOCIETY.

Biggs, W. D., Lometa.
*Black, D. W., Lampasas.
*Dildy, J. E., Lampasas.
Dorbandt, J. D., Lampasas.
Ellis, J. W., Lampasas.
Francis, W. D., (Sec.), Lampasas.
*Gaddy, H. R., Copperas Cove.
Herrington, J. L., Mullin.

Jones, R. H., Mullin.
Lowe, W. M., Lometa.
Townsend, J. B., Lometa.
Vaughan, E. W., (Pres.), Lampasas.
Whittenburg, Wm., Lometa.

McCULLOCH COUNTY MEDICAL SOCIETY.

*Anderson, J. S., (Sec.), Brady.
Callan, G. P., (Pres.), Brady.
Granville, J. B., Brady.
Jackson, O. C., Voca.
Land, Wm., Lohn.
*Matlock, J. W., Rochelle.
McCall, J. G., Brady.
Smith, D. D., Melvin.
Thompson, J. M., Mason.

MENARD-KIMBLE COUNTY MEDICAL SOCIETY.

Brisco, J. O., London.
Burt, Fred, Junction.
*Fenley, W. M., (Sec.), Menard.
Leggett, J. A., Menard.
Stone, D. S., Junction.

RUNNELS COUNTY MEDICAL SOCIETY.

*Allred, J. L., Winters.
*Blasdell, J. W., Ballinger.
Cheatham, A. B., Millersview.
Dixon, J. W., Wingate.
Douglas, J. G., Ballinger.
*France, J. W., Paint Rock.
*Halley, W. B., Ballinger.
Herndon, J. H., Miles.
Love, A. S., Ballinger.
Middleton, E. R., (Sec.), Winters.
Mitchell, W. W., Norton.
Mangum, T. E., Ballinger.
Sanders, W. D., Winters.
Tinkle, Fred, Winters.
Watson, C. A., Ballinger.

TOM GREEN COUNTY MEDICAL SOCIETY.

Adams, W. J., Robert Lee.
Batts, E. L., San Angelo.
Brooks, J. A., San Angelo.
Buchanan, L. C. G., Big Springs.
*Chaffin, J. B., San Angelo.
*Clayton, A. W., San Angelo.
*Cobb, W. W., (Pres.), San Angelo.
Cooper, C. T., San Angelo.
Cornick, Boyd, San Angelo.
Deal, E. O., Mertzon.
*DeLong, A. C., San Angelo.
Gowan, J. D., Christoval.
Gowan, C. R., Sterling City.
*Hixon, J. S., San Angelo.
Hess, D. L., Mereta.
Horney, Harlan, San Angelo.
Jones, G. T., San Angelo.
Kight, I. R., San Angelo.
*Lewis, G. L., San Angelo.
Longino, R. R., Ft. Stockton.
*Mays, C. E., San Angelo.
Marberry, A. J., San Angelo.
McAnulty, J. P., San Angelo.
McKnight, J. B., Carlsbad.
Minyard, J. E., Sterling City.
*Nibling, G. W., (Sec.), San Angelo.
*Parsons, S. C., San Angelo.
Proctor, T. K., San Angelo.
Rickman, J. R., Carlsbad.
Rush, H. P., Ft. Stockton.
Smith, S. L. S., San Angelo.
*Thompson, S. E., Carlsbad.
Turney, M. L., Ft. Stockton.
Utterback, A. P., Ozona.
*Wardlaw, H. R., Sonora.
Williams, J. M., San Angelo.
Yates, G. M., San Angelo.

FIFTH OR SAN ANTONIO DISTRICT.

Dr. W. A. King, San Antonio, Councilor.

ATASCOSA COUNTY MEDICAL SOCIETY.

Atkinson, R., Pleasanton.
*Davis, W. A., Austin.
Gipson, W. M., Poteet.
Johnson, L. S., (Pres.), Jourdanton.
Seale, W. E., (Sec.), Poteet.
Whittet, M. J., Anchorage.

BEXAR COUNTY MEDICAL SOCIETY.

Adams, R. S., San Antonio.
Aldape, S. G., San Antonio.
Allen, F. A., San Antonio.
Applewhite, S. M., San Antonio.
Applewhite, S. C., San Antonio.
Askew, T. B., San Antonio.
Baker, G. H., San Antonio.
Balde-Sarelli, P., San Antonio.
Barker, W. L., San Antonio.
Barnitz, H. D., San Antonio.
Bassett, W. M., San Antonio.
Beakley, S. S., San Antonio.
Beal, A. R., San Antonio.
Beck, L. K., San Antonio.
Beckmeyer, J. F., San Antonio.
Bell, Jas. Hall, San Antonio.
Berg, L. M., San Antonio.
Berry, C. C., San Antonio.
Berrey, D., San Antonio.
Betts, C. E., San Antonio.
Biggar, J. H., San Antonio.
Bindley, J. H., San Antonio.
Blair, H. A., San Antonio.
Bleim, M. J., San Antonio.
Bonner, W. F., San Antonio.
Bowen, R. E., San Antonio.
Brassell, T. C., San Antonio.
Braunnagel, J., San Antonio.
Brown, A. A., San Antonio.
Brustad, L. A., San Antonio.
*Burleson, J. H., San Antonio.
Cade, C. C., San Antonio.
Campbell, C. A. R., San Antonio.
Cassity, J. C., San Antonio.
Cerne, David, San Antonio.
Chatten, E. A., San Antonio.
Clavin, E. C., San Antonio.
Combe, F. J. San Antonio.
Cotham, C. M., Shertz.
Coyle, J. E., San Antonio.
*Cunningham, S. P., San Antonio.
Darrough, J. N., San Antonio.
*Davenport, R. G., San Antonio.
Davidson, A. M., San Antonio.
Deacon, J. T., San Antonio.
*DePew, E. V., San Antonio.
Dinwiddie, R. L., San Antonio.
*Dixon, Chas. D., San Antonio.
Donges, H. E., San Antonio.
Dorbandt, Thos., (Pres.), San Antonio.
Doty, W. H., San Antonio.
Duggan, Malone, San Antonio.
Edwards, D. S., San Antonio.
Elmendorff, E. H., San Antonio.
Evans, E. O., San Antonio.
Farmer, W. C., San Antonio.
Felder, J. L., San Antonio.
Forbes, M. A., San Antonio.
Frey, Conrad, San Antonio.
Goeth, R. A., San Antonio.
Goldblum, J., San Antonio.
*Goode, J. W., San Antonio.
Graves, Amos, San Antonio.
Gray, E. H., San Antonio.
Gwinn, G. E., San Antonio.
Hadra, Frederick, San Antonio.
*Hamilton, W. S., San Antonio.
*Hargis, W. H., San Antonio.
Harper, Mary C., San Antonio.
Harris, W. T., San Antonio.
Herff, A., San Antonio.
Herff, F. B., San Antonio.
Hicks, W. D., San Antonio.
Hicks, F. M., San Antonio.
Hirschfield, L., San Antonio.
Hull, Theo. Y., San Antonio.
Jackson, R. S., San Antonio.
Jackson, L. B., San Antonio.
Jackson, T. T., San Antonio.
Johnson, J. B., San Antonio.
Kahn, I. S., San Antonio.
Kemp, J. O., San Antonio.
Kenny, Nat, San Antonio.
Kenney, J. W., San Antonio.
King, C. E. R., San Antonio.
*King, W. A., San Antonio.
Kingsley, B. F., San Antonio.
Kruger, Oscar, San Antonio.
*Lankford, J. S., San Antonio.
*Largen, D., San Antonio.
Leap, H. L., San Antonio.
Lindahl, F. E., San Antonio.
*Lowery, S. T., San Antonio.
Luter, W. E., San Antonio.
McAdon, L. E., San Antonio.
*McCamish, E. W., San Antonio.
McDaniel, A. C., San Antonio.
McDaniel, A. S., San Antonio.
McIntosh, J. A., San Antonio.
McManus, W. F., San Antonio.
Milburn, C. L., San Antonio.
Miller, R. F., Brenham.
Mitchell, J. L., San Antonio.
*Moody, G. H., San Antonio.
*Moody, T. L., San Antonio.
Morton, J. R., San Antonio.
Moss, R. E., San Antonio.
Neal, J. F., Lytle.
Nixon, P. I. San Antonio.
O'Brien, M. C., San Antonio.
*Ogilvie, H. H., San Antonio.
Oldham, J. P., San Antonio.
Parker, T. T., San Antonio.
*Paschal, Frank, San Antonio.
Porter, G. L., San Antonio.
Postell, J. M., San Antonio.
Quillian, C. C., San Antonio.
Redmond, F. H., San Antonio.
Ricks, G. N., Pleasanton.
Robbie, Mary K., San Antonio.
Roberts, R. A., San Antonio.
Robertson, T. W., San Antonio.

Ross, R. R., San Antonio.
*Russ, W. B., San Antonio.
Sachs, A., San Antonio.
Sandoz, Edward, San Antonio.
*Scull, C. E., San Antonio.
Shaw, Thad, San Antonio.
Shropshire, L. L., San Antonio.
Simms, G. W., San Antonio.
Sorrell, E. W., San Antonio.
Spring, J. V., San Antonio.
Starnes, Wm. L., San Antonio.
Steele, J. S., San Antonio.
Stoker, Geo. P., San Antonio.
Stone, Duncan, San Antonio.
Stout, B. F., San Antonio.
Strayhorn, J. M., San Antonio.
Sturgis, W. E., San Antonio.
*Sykes, E. M., San Antonio.
Tainter, L. K., San Antonio.
Taylor, C. W., San Antonio.
Timmons, O. H., San Antonio.
*Touchstone, R. B., Lytle.
Town, F. L., San Antonio.
Traylor, Winn, San Antonio.
*Venable, Chas., San Antonio.
Walsh, F. C., San Antonio.
Walthall, T. J., San Antonio.
Warfield, C., San Antonio.
Watts, J. A., San Antonio.
Webb, J. G., Fort Worth.
Weinfield, L. M., San Antonio.
White, F. S., San Antonio.
*Wilson, H. T., San Antonio.
Withers, R. L., San Antonio.
Witte, B. E., San Antonio.
Wolff, W. M., San Antonio.
*Wooten, M. W., San Antonio.
Wyneken, H. O., San Antonio.
*Young, B. T., San Antonio.

COMAL COUNTY MEDICAL SOCIETY.

Barnwell, J. F., (Pres.), Johnson City.
Barron, W. M., Blanco.
Dunn, E. M., Hunter.
Fulcher, R. L., Blanco.
Garwood, A., New Braunfels.
*Hagler, M. C., New Braunfels.
Hinman, A. J., New Braunfels.
Leonards, H., New Braunfels.
Noster, A. H., New Braunfels.
Reeve, Jno. R., Blanco.
Wille, L. G., (Sec.), New Braunfels.
Wright, R., New Braunfels.

GUADALUPE COUNTY MEDICAL SOCIETY.

Anderson, R. B., (Pres.), Seguin.
Benbow, E. A., Kingsbury.
Benning, H., Cibolo.
Brandenberger, M. B., (Sec.), Seguin.
*Grace, M. B., Seguin.
Knolle, R. L., Seguin.
Meyers, Wm., Seguin.
Poth, N. A., Seguin.
Stamps, A. M., Seguin.
Williamson, C., Seguin.

GONZALES COUNTY MEDICAL SOCIETY.

Beverly, H. H., Smiley.
Brooks, R. C., Waelder.
Dawe, W. T., Gonzales.
Dexter, L. G., Harwood.
Dorsett, Theo., (Pres.), Gonzales.
*Dunning, W. T., (Sec.), Gonzales.
Elder, N. A., Nixon.
English, E. W., Slayden.
Fouts, J. J., Gonzales.
Henderson, J. C., Waelder.
Hildebrand, W. J., Gonzales.
Hinton, E. J., Wrightsboro.
Holmes, Geo., Leesville.
Littlefield, V. C., Nixon.
Parr, A. B., Gonzales.
Penrod, L., Gonzales.
Robertson, H. W., Waelder.
Smith, J. C., Belmont.

KARNES COUNTY MEDICAL SOCIETY.

Hammock, R. L., Kennedy.
Hickle, W. F., Kennedy.
King, S. A., Karnes City.
Nave, Sam F., Kennedy.
Pridgen, Jno. R., (Pres.), Gillett.
*Rushing, H., Runge.
Willbern, D. Y., Runge.
Young, E. R., Charco.
*Youngblood, R. C., (Sec.), Falls City.

KERR-KENDALL-GILLESPIE-BANDERA COUNTY MEDICAL SOCIETY.

Adams, J. M., Medina City.
Butler, J. C., Bandera.
Domingues, P. J., Kerrville.
Fowler, J. L., Ingram.
Jones, C. C., (Pres.), Confort.
Keidel, Victor, Fredericksburg.
Langford, W. L., Carpenter.
Palmer, E. E., Kerrville.
Peden, J. E., Fredericksburg.
Rappold, J. M., Bandera.
*Reeve, W. T., Boerne.
Roberts, A. A., Kerrville.
*Secor, W. L., (Sec.), Kerrville.

LA SALLE-FRIO COUNTY MEDICAL SOCIETY.

Barnard, W. L., Carrizo Springs.
*Cochran, E. G., Pearsall.
Gates, E. F., Moore.
Graham, R. L., (Sec.), Cotulla.
Hale, J. W., Fowlerton.
Hargus, J. W., Asherton.
*Howard, E. M., Pearsall.
Jameson, C. H., Fowlerton.
Pickett, B. E., (Pres.), Big Wells.
*Lightsey, J. N., Cotulla.
Terry, Wm., Dilley.
Wickware, M. A., Pearsall.
Williamson, L. C. Pearsall.

MEDINA COUNTY MEDICAL SOCIETY.

Bradley, B. R., (Pres.), Hondo.
Evans, J. R., Devine.
FitzSimon, J. T., Castroville.
Fletcher, J. H., (Sec.), Hondo.
Jones, J. A., D'Hanis.
Meyer, H. J., Hondo.
Smith, W. H., Hondo.
Woods, G. S., Devine.

UVALDE-EDWARDS COUNTY MEDICAL SOCIETY.

Bowman, A. R., Uvalde.
Campbell, I. N., Sabinal.
Clark, D. H., Utopia.
Cook, Paul, Uvalde.
*Eads, J. W., Barksdale.
Hines, B. M., Uvalde.
Hudson, S. B., (Sec.), Sabinal.
Hughes, E. T., Uvalde.
Knox, T. R., Uvalde.
Mahon, J. R., Sabinal.
Myrick, C. R., Uvalde.
Person, A. G., Uvalde.
Rogers, J. E., Rock Springs.
West, H. A., Leakey.

VAL VERDE COUNTY MEDICAL SOCIETY.

Boren, S. L., Del Rio.
Orr, B. F., Del Rio.
Ross, H. B., Del Rio.
Scott, R. M., (Pres.), Del Rio.
Stansill, Ivy, Sanderson.
York, D. A., (Sec.), Del Rio.

WILSON COUNTY MEDICAL SOCIETY.

Hutchinson, W. J., Poth.
Irwin, Alexander, Fairview.
Martin, R. G., La Vernia.
Oxford, J. W., (Pres.), Floresville.
Petrie, Socrates, Fairview.
Sparks, J. E., (Sec.), Floresville.
Ware, Ella, Stockdale.

SIXTH OR CORPUS CHRISTI DISTRICT.

Dr. W. N. Wardlaw, Corpus Christi, Councilor.

BEE COUNTY MEDICAL SOCIETY.

Bowman, N. H., Beeville.
Brown, W. O., Beeville.
Cayo, E. P., (Sec.), Beeville.
Egbert, Orville, Beeville.
Haynes, W. C., Beeville.
Hunter, J. B., Skidmore.
Hull, A. O., Beeville.
Irion, C. W., Mineral.
Luehrs, N. E., Mathis.
Neely, Houston, Beeville.
Poff, C. M., Tuleta.
*Prather, R. M., Beeville.
Reagan, C. H., Beeville.
Turner, A. J., Beeville.
Stephens, G. M., Beeville.

CAMERON COUNTY MEDICAL SOCIETY.

*Dickason, E. E., Brownsville.
Lawrence, O. V., Brownsville.
Letzerich, A. M., Harlingen.
Letzerich, C. W., Harlingen.
Loew, H. K., (Pres.), Brownsville.
McCain, E. S., Brownsville.
Pumerajo, A., Brownsville.
Rentfro, J. L., Brownsville.
Skipper, C. W., (Sec.), Westville.
Works, B. O., Brownsville.

HIDALGO COUNTY MEDICAL SOCIETY.

Austin, A. J. J., Los Ebanos.
Bennett, W. H., Falfurrias.
Buck, Chas. B., (Pres.), Mercedes.
Burnett, Thos. R., Mission.
Caldwell, Thos. J., Mission.
Dashiell, Walter R., (Sec.), Mission.
*Doss, J. M., Donna.
Edgerton, Geo. W., Rio Grande.
Edgerton, Mary A. H., Rio Grande.
Graham, W. A., McAllen.
Horner, A. M., Laredo.
Jeffries, John W., Mission.
Johnson, W. C., Pharr.
McGee, Wm. N., McAllen.
Miller, John B., Falfurrias.
Miller, James R., Edinburg.
Osborn, Frank E., McAllen.
Phillips, John H., McAllen.
Schoonmaker, Edw. C., Mercedes.
Shelton, Thos. H., Rio Grande.
Woodall, W. P., Hidalgo.

JIM WELLS COUNTY MEDICAL SOCIETY.

Atkinson, N. W., Alice.
Collins, E. E., Premont.
Elliott, R. C., San Diego.
Perkins, M. J., (Sec.), Alice.
Strickland, J. S., Alice.

KLEBURG COUNTY MEDICAL SOCIETY.

Allison, Hendery, Kingsville.
Bartlett, Glenn, Kingsville.
Cross, Edward, Kingsville.
Drake, C. E., Kingsville.
Graves, H. N., Kingsville.
Guajardo, Eusebia, Kingsville.
Huffman, W. S., Kingsville.
Mathews, R. L., (Sec.), Kingsville.
Miles, M. E., Kingsville.
Miles, Amy, Kingsville.
*Shelton, J. H., Kingsville.

NUECES COUNTY MEDICAL SOCIETY.

Arnold, E. O., Port Aransas.
Barnard, W. C., Corpus Christi.
Bibb, R. H. L., Corpus Christi.
Caldwell, H., Corpus Christi.
*Caldwell, A. J., Corpus Christi.
Cohn, J. D., Corpus Christi.
Davis, L. M., Robstown.
*Davisson, A. W., (Sec.), Corpus Christi.
Dodge, S. T., (Pres.), Corpus Christi.
Giles, H. R., Corpus Christi.
Grant, J. H., Corpus Christi.
Gregory, G. W., Corpus Christi.
Heaney, H. B., Corpus Christi.
Kaffie, L., Corpus Christi.
Martinez, P., Corpus Christi.
Morgan, J. B., Robstown.
*Painter, F. U., Corpus Christi.
Payne, C. M., Corpus Christi.
Peters, W. L., Corpus Christi.
Redmond, Henry, Corpus Christi.
Robinson, J. J., Corpus Christi.
Spohn, P. D., Corpus Christi.
Turpin, T. J., Corpus Christi.
*Wardlaw, W. N., Corpus Christi.
White, C. I., Christine.
Wills, W. E., Corpus Christi.
Williams, C., Bishop.
*Yeager, C. P., Corpus Christi.

SAN PATRICIO COUNTY MEDICAL SOCIETY.

Carpenter, J. D., Refugio.
Davendorf, Louis E., Taft.
Elkins, H. T., (Pres.), Sinton.
Goodwin, R. T., (Sec.), Sinton.
Guinn, W. B., Tivoli.
Hightower, A. F., Odem.
Manhoff, L. J., Aransas Pass.
McMillin, V. H., Portland.
*Noble, Walter, Aransas Pass.
*Reinhardt, W. C., Sinton.
Rogers, I. S., Woodsboro.
Vermillion, J. W., Sinton.
Watson, O. C., Corpus Christi.
Wendelken, Chas., Gregory.
Whitacre, Stanley, Sinton.
*Worley, Preston, Rockport.

WEBB COUNTY MEDICAL SOCIETY.

Austin, H. M., Laredo.
Cook, O. J., (Sec.), Laredo.
Cook, A. T., Minerva.
Garlick, H. S., Laredo.
Gongora, F. G., Laredo.
Hall, H. C., Laredo.
Halsell, J. T., Laredo.
Hamilton, H. J., (Pres.), Laredo.
Leal, M. T., Laredo.
Lowry, W. E., Laredo.
Sauvignet, E. H., Laredo.
Wilcox, A. W., Laredo.

SEVENTH OR AUSTIN DISTRICT.

Dr. T. J. Bennett, Austin, Councilor.

BASTROP COUNTY MEDICAL SOCIETY.

*Carter, C. H., Smithville.
*Chapman, P., (Sec.), Smithville.
Combs, H. B., Bastrop.
Harris, N. B., Red Rock.
Kraulik, F. J., Smithville.
Luckett, H. P., Bastrop.
*Otken, C. H., Paige.
Norfsinger, I. B., Elgin.
Powell, J. H. E., Smithville.
Taylor, T. B., Elgin.
Wood, W. E., Elgin.

BURNET COUNTY MEDICAL SOCIETY.

Edens, H. L., (Pres.), Bertram.
Garrett, H. S., (Sec.), Bertram.
Harwood, Geo., Marble Falls.
Howell, A., Burnet.
Jackson, M. L., Spicewood.
Williamson, J. L.,
Yeary, J. W., Lake Victor.

CALDWELL COUNTY MEDICAL SOCIETY.

Alexander, K., McMahan.
Brewer, J. C., Dale.
Burks, J. M., Dale.
Clark, F. A., Fentress.
Coopwood, T. B., Lockhart.
Francis, S. J., Luling.
*Hewlett, L. L., Lockhart.
Johnson, M., Fentress.
Karbach, F. R., Maxwell.
Morgan, W. M., Lockhart.
Nichols, H. C., Luling.
O'Banion, W. H., Lockhart.
Pitts, W. M., Luling.
Ross, A. A., Lockhart.
*Smith, Edgar (Sec.), Lockhart.
*Van Ness, J. M., Prairie Lea.
Watkins, J. M. (Pres.), Luling.
Williamson, D. B., Lockhart.

HAYS COUNTY MEDICAL SOCIETY.

Beall, Ed., San Marcos.
Boston, Ernest, San Marcos.
de Steigner, J. R., San Marcos.
*Edwards, L. L., San Marcos.
Kinney, T., San Marcos.
Powell, E. T. (Pres), San Marcos.
Raetzsch, C. W., San Marcos.
Shaver, P. J. (Sec.), San Marcos.
Van de Venter, M. C., San Marcos.
Wall, J. A., San Marcos.
Wall, S. D., Kyle.
Williams, M. C., San Marcos.
Williams, W. C., San Marcos.

LEE COUNTY MEDICAL SOCIETY.

Black, R. C., Bayside.
Connor, A. C., Lexington.
Gates, C. S., Giddings.
Johnson, J. M., Giddings.
Jones, C. M. (Sec.), Ledbetter.
Mayfield, I. N., Giddings.
O'Barr, J. T., Lees.
Shaffer, C. (Pres.), Lexington.
Southern, G. W., McDade.
Womach, R. H., Lexington.
York, W. E., Giddings.

LLANO COUNTY MEDICAL SOCIETY.

Avant, J. A., Valley Springs.
Darnell, C. F. (Sec.), Llano.
Fowler, W. Y., Llano.
*Huff, Oscar, Castell.
Selman, H. S. (Pres.), Llano.
Townsend, E. D., Llano.

SAN SABA COUNTY MEDICAL SOCIETY.

Behrns, C. L., (Sec.), Cherokee.
Bickham, W. S., San Saba.
Burleson, Emmett, Richland Springs.
*Nelson, A. D., Richland Springs.
Rimmer, S. W. (Pres.), San Saba.
Sanderson, W. S., San Saba.

TRAVIS COUNTY MEDICAL SOCIETY.

Bailey, E. B., Austin.
*Bennett, T. J., Austin.
Beverly, A. F., Austin.
*Bibb, L. B., Austin.
Black, W. B., Austin.
Boerner, M. H., Austin.
Bradfield, J. W., Austin.
*Carrington, H. D., Austin.
*Clark, S. J., Austin.
Davis, R. L., Austin.
Dawson, I. J., Austin.
Decherd, G. M., Austin.
Eckhardt, J. C. A. (Sec.), Austin.
Gibson, J. W., Austin.
Gilbert, Joe, Austin.
Gilbert, G. H., Austin.
Gilliland, C. E., Austin.
Graham, G. M., Austin.
Granberry, H. B., Austin.
Graves, R. S., Austin.
Gregg, F., Manor.
Gullette, J. F., Austin.
Haigler, S. G., Austin.
Harper, W. A., Austin.
Harper, H. W., Austin.
Hilgartner, H. L., Austin.
Hill, H. B., Austin.
Holliday, M., Austin.
*Hudson, S. E., Austin.
Hudson, R. B., Austin.
Johnson, L. L., Richmond.
Jones, B. F., Austin.
*Key, S. N., Austin.
King, R. W., Austin.
Kirk, L. H., Austin.
Krueger, E., Austin.
Kuehne, H., Austin.
Kuhn, Aug., Austin.
Lacy, L. L., Austin.
Litten, Frank, Austin.
Loving, J. M., Austin.
Mathews, C. A., Austin.
Mathis, E. G., Austin.
*Maxwell, T. O., Austin.
McCaleb, W. E.. Austin.
*McLaughlin, J. W., Austin.
McLaughlin, F. P., Austin.
Moore, S. H., Austin.
Murray, R. V., Austin.
Nichols, J. R., Austin.
Pettway, T. R., Austin.
Preston, J. W., Austin.
Scott, Z. T., Austin.
Shipp, R. W., Austin.
*Smart, G. P., Manor.
Steiner, Ralph, Austin.
Sterzing, H. F., Austin.
Stroberg, J. A., Austin.
Suehs, P. E., Austin.
Taylor, E. B., Webberville.
Watts, W. N., Austin.
Weller, C. B., Austin.
Wickline, R. M., Austin.
Wilhite, J. T., Austin.
Woolsey, S. A., Austin.
Wooten, J. S., Austin.
Wooten, G. H., Austin.

WILLIAMSON COUNTY MEDICAL SOCIETY.

Atkinson, O. B., Florence.
Atkinson, W. H., Florence.
Beckman, A., Bartlett.
Bledsoe, R. E., Taylor.
Boyd, J. L., Taylor.
*Bundy, O. T., Hutto.
Collier, J. I., Taylor.
*Cooke, D. M., Granger.
Crockett, R. H., Hutto.
Doak, E., Taylor.
*Feaster, H., Coupland.
Fleming, W. P., Georgetown.
*Floeckenger, F. C., Taylor.
Foster, C. C., Granger.
Foster, G. W., Georgetown.
*Fowler, W. D., Liberty Hill.
Hale, J. W., Weir.
Harrell, T. M., Round Rock.
Hazelwood, W. R., Leander.
Helms, W. L. (Pres.), Jonah.
Henschen, G. E., Georgetown.
Hopkins, Y. F., Thrall.
Jones, G. M., Taylor.
Martin, S. S., Georgetown.
McDaniels, I. H., Weir.
Mikeska, E., Taylor.
Moses, W. H., Georgetown.
Mussill, A. C., Granger.
Nowlin, B., Georgetown.
*Pettus, W. G. (Sec.), Georgetown.
Roberts, J. T., Taylor.
Robertson, G. L., Leander.
Schultz, Wm., Georgetown.
Simmons, C. L., Liberty Hill.
*Stromberg, E. W., Taylor.
*Taylor, J. F., Briggs.
*Thornton, C. W., Georgetown.
*Thomas, E. M., Georgetown.
*Vaughan, J. H., Liberty Hill.
Webber, W. G., Round Rock.
Wedemeyer, G. A., Taylor.
*Willerson, J. E., Jarrell.
Winn, W. A., Granger.
Wood, E. M., Hutto.

EIGHTH OR DeWITT DISTRICT.

Dr. Walter Shropshire, Yoakum, Councilor.

COLORADO COUNTY MEDICAL SOCIETY.

Cook, C. G., Weimar.
Creviston, C. D., Rock Island.
Cross, G. W., Eagle Lake.
Davidson, J. K., Eagle Lake.
Doole, T. P., Eagle Lake.
Duve, C. E., Weimar.
Fehrenkamp, B. J., Frelsburg.
Gordon, E. C., Columbus.
Halamicek, J. A., Nada.
Harrison, R. H., Alleyton.
Harrison, J. W., Columbus.
McLeary, S. B., Weimar.
Payne, J. H., Columbus.
Pridgen, R. E., Oakland.
Roberts, W. J., Garwood.
Wright, C. M., Rock Island.
Youens, W. G. (Sec.), Columbus.

DeWITT COUNTY MEDICAL SOCIETY.

*Allen, Geo. W., Yorktown.
Arnecke, A. H., Arneckeville.
Barfield, A. J., Westhoff.
Bartlett, Henry L., Meyersville.
Beckmann, Albert, Yoakum.
Blackwell, Finley D., Hocheim.
*Boothe, S. P., Westhoff.
Braun, Isidore, Westhoff.
*Brown, Harry H., Yoakum.
Burns, John W., Cuero.
Curtis, Kim D., Cuero.
*Duckworth, Guilford (Pres.), Cuero.
Duncan, J. F., Yoakum.
Eckhardt, Herman C., Yorktown.
Frobese, J. R., Cuero.
Gillette, W. R., Cuero.
Hastings, W. S., Cuero.
Lackey, J. M., Cuero.
Mernitz, Chas., Nordheim.
Milner, R. M., Yoakum.
Mugge, Oscar J., Cuero.
Nowierski, J. B. (Sec.), Yorktown.
O'Quin, C. L., Weesatche.
Pridgen, J. E., Thomaston.
Reuss, J. H., Cuero.
*Trayler, J. H., Odessa.
Trible, J. M., Cuero.
Walker, W. H., Yoakum.
Ward, Jeremiah, Jr., Nopal.
Westphal, Robert, Yorktown.

FAYETTE COUNTY MEDICAL SOCIETY.

Crow, C. J., Muldoon.
Ferrell, A. F., Cistern.
Haarske, O. F., Carmine.
*Hoch, C. M. (Sec.), LaGrange.
*Knolle, R. H., LaGrange.
Knolle, A. P., Ellinger.
Kotzebue, A. M., Flatonia.
McKay, Donald (Pres.), Flatonia.
Schulze, Emile C., LaGrange.
Smith, J. W., LaGrange.

LAVACA COUNTY MEDICAL SOCIETY.

Daehne, F. G., Moulton.
Dimmitt, F. W., Yoakum.
Evans, E. A., Hope.
Gray, J. D., Shiner.
*Guenther, F. J., Moulton.
Guenther, Jno. J., Moulton.
*Kopecky, L. C., Shiner.
Lay, J. E. (Pres.), Hallettsville.
*Lay, J. R., Richmond.
Ledbetter A. A., Hallettsville.
Ramsel, P. A., Shiner.
Schiller, J. J., Rowena.
Schulze, G. S., Gonzales.
Shepherd, M. R., Sublime.
*Shropshire, Walter (Sec.), Yoakum.
Youngkin, J. S., Yoakum.

MATAGORDA COUNTY MEDICAL SOCIETY.

Bouldin, W. W., Bay City.
Byars, C. R., Bay City.
Elliott, J. R., Palacios.
Foote, S. A. (Sec.), Bay City.
Jones, C. P., Bay City.
*Morton, A. S. (Pres.), Bay City.
Phillips, B. A., Matagorda.
Reed, J. W., Bay City.
*Scott, E. E., Bay City.
Simons, J. E., Bay City.
Wagner, J. R., Palacios.
Wagner, Harriette, Palacios.

VICTORIA-CALHOUN COUNTY MEDICAL SOCIETY.

Borden, J. L., Victoria.
Braman, D. H., Victoria.
Chilton, L. W., Goliad.
Cloud, W. O., DaCosta.
*Covington, Chas. M., Inez.
DeTar, W. T., Victoria.
Dodson, W. M., Marianna.
Harper, W. A., Nursery.
Hopkins, R. R., Victoria.
Hopkins, J. V., Victoria.
Malsch, E. A., Victoria.
McMullen, O. S., Victoria.
Rape, W. A., Victoria.
Roemer, Fred J., Port Lavaca.
Rush, J. W., Bloomington.
Sargeant, F. L. (Sec.), Victoria.
Shields, F. B. (Pres.), Victoria.
Smith, F. M., Bloomington.
Smith, J. L., Victoria.
Spivak, L. J., Victoria.
Ward, W. L., Victoria.
Williams, F. R., Victoria.

WHARTON-JACKSON COUNTY MEDICAL SOCIETY.

Andrews, J. M., Wharton.
Boone, H. C. (Pres.), Wharton.
Davidson, G. L., Wharton.
Davidson, T. L. (Sec.), East Bernard.
Davidson, W. L., Glenflora.
Dobbs, J. C., Ganado.
Jones, C. L., East Bernard.
La Bauve, R. E. L., Edna.
Lancaster, W. H., Ganado.
Mackay, J. H., Francitas.
Neal, T. M., Wharton.
Passmore, B. H., El Campo.
Radkey, O. H., Edna.
Redwine, D. P., El Campo.
Wireback, N. H., Iago.

NINTH OR HOUSTON DISTRICT.

Dr. W. W. Ralston, Houston, Councilor.

AUSTIN COUNTY MEDICAL SOCIETY.

Brown, Walter T. (Pres.), Wallis.
Davidson, J. S., Galveston.
Hover, Frank W., Sealy.
Irvin, Alexander, Wallis.
*Knolle, Bernard E., Industry.
Knolle, Otto J., Industry.
Kubricht, Theophelis, Wallis.
*Kraulik, John, Bellville.
Neeley, Jubol A., Peters.
Shoepfer, Rene L., Sealy.
Schramm, Chas. J., Fayetteville.
Steck, Otto E. (Sec.), Bellville.
Thompson, Robert W., Houston.
Trenckmann, Otto A., Bellville.
Waldrop, John W., Sealy.

BRAZOS COUNTY MEDICAL SOCIETY.

*Cline, Wm. B., Bryan.
Ehlinger, Otto, College Station.
Emory, G. W., Bryan.
*Harrison, R. H., Bryan.
Hunnicutt, R. J. (Sec.), Bryan.
Lee, G. F., Welborn.
Mondrick, A. L., Bryan.
Oliver, W. H., Bryan.
Rea, G. L., Bryan.
Richardson, S. C., Bryan.
Sims, B. U., Bryan.

BRAZORIA COUNTY MEDICAL SOCIETY.

DeWalt, D. C., Otey.
Eades, W. H., Sweeney.
Fausett, G. F., Freeport.
Hampil, C. C., Brazoria.
Long, W. E., Pearland.
Motheral, J. D., Angleton.
*Mathews, J. F., Alvin.
Maxey, S. B., Angleton.
Pollard, A. J. (Sec.), Alvin.
Shafer, C. L., Alvin.
Weems, M. L., Jr., Brazoria.
Weems, M. A., Columbia.
*Winn, F. R., Alvin.

BURLESON COUNTY MEDICAL SOCIETY.

Goodnight, T. L. (Sec.), Caldwell.
*Honeycutt, J. B., Caldwell.
Krueger, A. G. (Pres.), Caldwell.
Richardson, A. P., Somerville.
Sherrill, C. A., Caldwell.

FORT BEND COUNTY MEDICAL SOCIETY.

Deatherage, S. G., Sugarland.
Johnson, J. C., Richmond.
*Minton, W. H., Missouri City.
Munroe, R. M. (Sec.), Richmond.
O'Farrell, J. M., Richmond.
Stuckey, J. H. (Pres.), Rosenburg.
Yates, J. S., Rosenburg.

GALVESTON COUNTY MEDICAL SOCIETY.

*Arms, B. L., Galveston.
Aves, F. W., Galveston.
Breath, W. P., Galveston.
Carter, T. J., League City.
Carter, W. S., Galveston.
Chase, E. D., Galveston.
Cooke, H. P., Galveston.
Cooke, W. R., Galveston.
Cooke, L. B., Galveston.
*Cox, E. S., Galveston.
Dallas, L. W., League City.
Danford, F. N., Texas City.
Davis, F. W., Texas City.
Delaney, G. E., Galveston.
Dietzel, Marie P., Galveston.
Fahring, G. H., Anahuac.
Fisher, W. C., Galveston.
Fisher, F. K., Galveston.
Fisher, W. C., Jr., Galveston.
Flautt, J. A., Galveston.
Flynn, J. G., Galveston.
Fly, A. W., Galveston.
Fowler, C. F., Galveston.
Gammon, Wm., Galveston.
*Graves, M. L. (Sec.), Galveston.
Haden, Henry C., Galveston.
Hadley, W. A., Dickinson.
Harris, L. R., Galveston.
Hartman, Henry C., Galveston.
Heard, E. L., Galveston.
Heard, A. G., Galveston.
Hoecker, W. L., Galveston.
*Huntington, Sofie Herzog, Brazoria.
Jinkins, W. J., Galveston.
Keiller, Wm., Galveston.
Kennedy, T. L., Galveston.
*Kenner, E. B., Galveston.
Knight, H. O., Galveston.
Kreisle, M. F., Galveston.
Kruger, F. R., Galveston.
Lawrence, D. H., Galveston.
*Lee, Geo. H. (Pres.), Galveston.
Morgan, Geo. L., Turtle Bayou.
Morris, S. M., Galveston.
Nave, T. W., Galveston.
Pabst, O. C., Galveston.
Peters, O. K., Galveston.
Powell, E. V., Galveston.
Ralston, J. C., Galveston.
Randall, Edward, Galveston.
Rowley, Frances, Galveston.
Ruhl, J. H., Galveston.
*Sappington, H. O., Galveston.
Schilling, J. G., Cedar Bayou.
Shearer, A. B., Mont Belvieu.
Sherrin, J. A., Galveston.
Singleton, A. O., Galveston.
Smith, L. T., Port Bolivar.
*Starley, W. F., Galveston.
Sykes, G. S., Galveston.
*Thompson, J. E., Galveston.
Tucker, J. P., Galveston.
Wall, D. P., Galveston.
Wassam, A. M., Galveston.
Wright, W. C., Galveston.

GRIMES COUNTY MEDICAL SOCIETY.

Baylis, E., Huntsville.
Davis, Oscar, Anderson.
Emory, S. J. (Pres.), Navasota.
Greenwood, W. W., Navasota.
Harris, E. A. (Sec.), Navasota.
Harris, G. C., Courtney.
Hooper, J. S., Navasota.
McAlpine, A. D., Navasota.
*McMillan, C. M., Plantersville.
Roberson, J. D., Plantersville.
Peeples, D. L., Navasota.
Quinn, M. J., Iola.
Wilson, H. M., Navasota.
Wilson, W. T., Navasota.

HARRIS COUNTY MEDICAL SOCIETY.

Akehurst, R. L., Houston.
*Allen, N. N., Houston.
Allen, L., Houston.
Archer, W. A., Houston.
Archer, P. M., Houston.
Armstrong, E. M., Houston.
*Arnold, E. M., Houston.
Aves, C. M., Houston.
Aydam, C. W., Houston.
Balsinger, W. E., New Orleans, La.
Barnes, F. L., Houston.
Barrell, C. C., Houston.
Bennett, W. H., Humble.
Bertner, E. W., Houston.
Blair, J. M., Houston.
Boyd, J. G., Houston.
Boyles, J. M., Houston.
Brokaw, C. P., Houston.
Brown, H. E., Houston.
Bruhl, C. E., Houston.

Burditt, J. B., Houston.
Campbell, C. M., Houston.
Clark, J. E., Houston.
Cloud, R. E., Houston.
*Cody, C. C., Houston.
*Cooke, E. F., Houston.
Coop, B. F., Houston.
Cox, R. L., Houston.
Cronin, P. H., Houston.
Cruse, P. R., Houston.
Daily, Louis, Houston.
Daily, Ray K., Houston.
Davis, E. P., Houston.
Dawes, Raymond, Houston.
Denman, P. R., Houston.
Dubose, J. B., Humble.
Duckett, J. D., Houston.
Dunnam, T. E., Spring.
Eckhardt, W. R., Houston.
Eidman, F. G., Houston.
Ellis, N. B., Houston.
Ellis, B. V., Houston.
Englehardt, H. A., Houston.
*Ehrhardt, W., Houston.
Eskridge, Belle C., Houston.
Eskridge, J. H., Houston.
Fancher, R. M., Houston.
Feagan, H. C., Houston.
Flickwir, A. H., Houston.
*Florence, J. H., Houston.
*Foster, J. H., Houston.
*Gantt, M. A., Houston.
Gibbs, J. P., Houston.
Gilliam, H. R., Houston.
Glover, F. S., Houston.
Goar, E. L., Houston.
Gohlman, W. H., Houston.
Gray, E. N., Houston.
Green, C. C., Houston.
*Greenwood, Jas., Houston.
Greer, A. E., Houston.
Griffith, C. W., La Porte.
Haley, W. A., Houston.
Hall, G. P., Houston.
Hamilton, Gavin, Houston.
Hamilton, E. J., Houston.
Hanna, L. C., Houston.
Harwood, Chas. B., Houston.
Harrison, R. H., Houston.
Herndon, R. F., Houston.
*Hill, Jas. A., Houston.
*Hodges, J. E., Houston.
*Hoeflich, C. W., Houston.
*Howard, A. P., (Pres.), Houston.
Israel, Sidney, Houston.
King, F. B., Houston.
Kirkham, H. L., Houston.
*Knox, R. W., Houston.
Krause, A., Houston.
*Kyle, A. J., Houston.
Lancaster, E. H., Houston.
Lane, J. W., Houston.
Larendon, G. W., Houston.
Lechinger, G. H., Houston.
Legnard, Jno. B., Houston.
*Lister, S. M., Houston.
Martin, W. H., Houston.
McGinnis, G. S., Houston.
McMurry, M. W., Houston.
*McNeil, H. L., Galveston.
Meyer, G. H., Houston.
Michael, J. C., Houston.
Miller, K. M., Houston.
Miner, H. S., Aldine.
Moers, R. H., Houston.
*Moore, H. C., Houston.
Moore, S. H., Houston.
*Moore, Jno. T., Houston.
Morris, R. T., Houston.
Mullen, J. A., Houston.
Murray, E. C., Houston.
Mynatt, A. J., Houston.
Neuhaus, F. H., Houston.
Norsworthy, O. L., Houston.
Northrup, S. G., Houston.
Norton, E. A., Houston.
Parker, G. D., Houston.
Parkhill, F. G., Houston.
Patterson, C. U., Houston.
Priester, W. G., Houston.
Pritchett, I. E., Houston.
Pulliam, S. T., Houston.
*Ralston, W. W., Houston.
Raney, L. W., Houston.
Red, S. C., Houston.
Robinson, G. J., Houston.
Robbins, E. F., Houston.
Ross, F. R., Houston.
Sandlin, J. W., Humble.
*Sauermann, W. O., Houston.
*Scardino, P. H., Houston.
Schnell, J. B., Houston.
Schmoeller, W., Houston.
Scott, J. W., Houston.
Short, J. L., Houston.
*Slataper, F. J., Houston.
Smith, P. L., Houston.
Smith, S. J., Houston.
Stokes, M. B., Houston.
Spivak, L. J., Houston.
Spurlock, G. H., Houston.
Stephenson, Chas. W., Houston.
Taylor, J. L., Philadelphia, Pa.
Thompson, W. R. P., Biloxi, Miss.
Thorne, J. W., Houston.
Thorning, W. B., Houston.
Towles, R. H., Houston.
Turner, B. W., Houston.
*Van Zant, B. T. (Sec.), Houston.
White, A. E., Houston.
Wier, W. M., Houston.
Wilkes, F. B., Houston.
Wilson, R. D., Houston.
*Wood, M. A., Houston.
Wright, Elva A., Houston.
Wright, E., Houston.
York, J. B., Houston.

MADISON COUNTY MEDICAL SOCIETY.

Barnes, C. V., Madisonville.
Berry, H. A., Madisonville.
*Burney, J. E., North Zulch.
Day, G. P., Madisonville.
Green, J. E., Midway.
Jordan, J. D., Madisonville.
Morris, J. E., (Sec.), Madisonville.
Patton, O., Midway.

MONTGOMERY COUNTY MEDICAL SOCIETY.

Frazier, L., (Sec.), Conroe.
*Hooper, W. N., Conroe.
Ingrum, E. L., Conroe.
Morriss, W. D., Conroe.
Walters, H. W., Montgomery.

WALLER COUNTY MEDICAL SOCIETY.

Bains, L. W., Brookshire.
Bing, R. E., (Sec.), Waller.
LeGrand, C. W., Hempstead.
Mahan, Lee L., Hempstead.
*Searcy, Claude A., (Pres.), Hempstead.

WALKER COUNTY MEDICAL SOCIETY.

Angier, E. L., Jr., Huntsville.
Autrey, A. R., Elmina.
Baylis, Eugene, Huntsville.
Bush, L. H., Huntsville.
Curtis, M. E., (Pres.), New Waverly.
Fowler, W. E., Huntsville.
Gustine, N. W., Hawthorne.
Hendricks, J. P., Huntsville.
Thomason, J. W., (Sec.), Huntsville.
Tinsley, O. M., New Waverly.

WASHINGTON COUNTY MEDICAL SOCIETY.

Bowers, S., (Pres.), Brenham.
Campbell, W. R., Chappel Hill.
*Haaskarl, W. F., Brenham.
Knolle, K. C., Brenham.
Lenert, R. H., (Sec.), Brenham.
Nickelson, R. E., Brenham.
*Pier, T. J., Brenham.
Tottenham, J. W., Brenham.
Williamson, J. R., Brenham.

TENTH OR SOUTHEASTERN DISTRICT.

Dr. A. R. Sholars, Orange, Councilor.

JASPER-NEWTON COUNTY MEDICAL SOCIETY.

Blow, F. T., Call.
Chambers, Karl, Jasper.
Charlton, L., Evadale.
Cunningham, H. C., Roganville.
Grimes, J., Browndell.
Hargrove, R. M., Call.
Masterson, J. P., Bessmay.
McCreight, W. F., Kirbyville.
*McMickin, D., (Sec.), Kirbyville.
Morgan, A. D., Magnolia Spgs.
Powell, C. N., Deweyville.
Richardson, A. J., Jasper.
Selman, B. E., Browndell.
Swinney, B. A., Jr., Newton.
Swinney, B. A., Sr., (Pres.), Newton.
Worthey, W. R., Woodmyer.

JEFFERSON COUNTY MEDICAL SOCIETY.

Barr, H. A., Beaumont.
Barclay, A., Aldridge.
Bevil, John R., Batson.
*Bledsoe, Murf F., Port Arthur.
Blewett, Wm. H., Beaumont.
Braden, A. H., Beaumont.
Brown, Walter D., Silsbee.
Calhoun, B. F., Beaumont.
*Cobb, Carmot A., Beaumont.
Cole, Chas. A., Stonell.
Cruse, J. B., Beaumont.
Crumpler, W. E., Port Arthur.
Cunningham, Will W., Beaumont.
DuBose, A. J., Village Mills.
Falvey, J. C., Beaumont.

Ferguson, E. C., (Pres.), Beaumont.
French, J. M., Silsbee.
Garth, J. W., Beaumont.
Gober, J. M., Beaumont.
Goldstein, Louis, Beaumont.
Haizlip, J. H., Nederland.
Hander, F. W., Beaumont.
Harlan, Herbert D., Beaumont.
Herrington, Ira C., Orange.
Hodges, Ollie S., Beaumont.
Holland, B. P., (Sec.), Beaumont.
Johnson, L. F., Beaumont.
Laidacher, N. E., China.
Lawson, F. W., Orange.
Mann, Jas., Fuqua.
Martin, Felix S., Beaumont.
Martin, G. D., Beaumont.
McAllister, F. E., Texla.
Pedigo, H. B., Beaumont.
Phillips, J. C., Port Arthur.
Pollock, A. S., Sabine.
Price, J. S., Beaumont.
Reagan, J. H., Beaumont.
*Record, Joseph, Beaumont.
Reed, Guy H., Beaumont.
Roberts, John T., Kountze.
Selman, T. B., Voth.
Smith, J. G., Port Arthur.
Smith, L., Sabine.
Speer, David, Sour Lake.
Swearingen, Mercer, Honey Island.
Swonger, J. B., Beaumont.
*Tadlock, J. T., Dayton.
Tatum, W. E., Beaumont.
*Thomson, Wilbur F., Beaumont.
*Wier, D. S., Beaumont.
Williams, W. T., Beaumont.
Winters, W. S., Sr., Port Arthur.
Winters, W. S., Jr., Port Arthur.
Young, Warren G., Port Arthur.

NACOGDOCHES COUNTY MEDICAL SOCIETY.

Adams, E. S., Garrison.
Barham, Geo. S., Nacogdoches.
*Barton, Y. P., Cushing.
*Blackwell, T. J., (Sec)., Nacogdoches.
Campbell, W. H., Nacogdoches.
Castleberry, W. T., Alazan.
Deal, J. B., Nacogdoches.
Ford, F. C., (Pres.), Nacogdoches.
Mast, Ellis, Chireno.
Milner, W. B., Sacul.
Nelson, A. A., Nacogdoches.
P'Poole, M. W., Nacogdoches.
*Rogers, C. G., Cushing.
Samuels, G. E., Appleby.
*Sweatland, A. E., Nacogdoches.
*Tucker, F. R., Nacogdoches.
Weeks, J. T., Appleby.
Weeks, J. W., Beasley.

ORANGE COUNTY MEDICAL SOCIETY.

*Coyle, W. P., Orange.
Hewson, J. P., Orange.
Jordon, R. H., Lemonville.
Pearce, A. G., Orange.
Reeves, J. E., Orange.
Sholars, S. W., (Pres.), Orange.
*Sholars, A. R., (Sec.), Orange.
Yates, J. D., Orange.

POLK COUNTY MEDICAL SOCIETY.

Bates, T. H., (Sec.), Camden.
Bergman, H., Livingston.
Bomar, Chas. V., Cross Plains.
Denham, H. S., Livingston.
Falvey, Thos. S., Fostoria.
Handley, F. B., Hortense.
Harris, T. F., New Willard.
Hubert, J. M., Hightower.
Love, R. B., Livingston.
Marsh, B. C., Livingston.
McCardell, D., Cold Springs.
McCardell, W. K., Livingston.
Pullen, W. G., Corrigan.
*Robinson, C. H., Cleveland.
Shine, U. H., Leggett.
Smith, J. M., Conroe.
Stewart, R. P., Corrigan.
Taylor, Martin J., (Pres.), Camden.
Weeks, P. W., Benford.

SABINE COUNTY MEDICAL SOCIETY.

Arnold, W. T., Jr., (Sec.), Hemphill.
Arthur, W. C., Bronson.
*Cousins, R. D., Pineland.
Fortenberry, J. C., Brookland.
Goodrich, R. L., Milam.
*Morgan, T. B., Bronson.
Norwood, E. O., Bronson.
Ramsdell, R. L., San Augustine.
Smith, E. G., Remlig.
Smith, J. W., (Pres.), Hemphill.
Smith, C. F., Hemphill.
McGown, M. W., Yellow Pine.
White, H. T., Geneva.

SHELBY COUNTY MEDICAL SOCIETY.

Bryan, C. O., Center.
Calhoun, T. G., Tenaha.
Carroll, E. S., Center.
Clements, E. B., Timpson.
Clements, P. C., Timpson.
Duke, A. W., Center.
*Hurst, T. L., Neuville.
Johnson, F. O., Timpson.
Ramsey, W. A., Joaquin.
Rushing, Jno. G., (Sec.), Center.
Sims, J. B., Center.
Swearingin, P. G., Houston.
Warren, W. H., Joaquin.
Whiteside, M. H. E., Timpson.
Whiteside, T. F., Timpson.
Windham, W. C., Shelbyville.
Windham, J. H., (Pres.), Shelbyville.

TYLER COUNTY MEDICAL SOCIETY.

Cade, L. R., Chester.
Coker, C. S., Chester.
Dicken, R. E., Woodville.
Jordan, B. L., Colmesneil.
Shivers, J. F., (Sec.), Woodville.
Thomas, J. H., (Pres.), Doucette.

ELEVENTH OR EASTERN DISTRICT.

Dr. C. C. Nash, Palestine, Councilor.

ANDERSON COUNTY MEDICAL SOCIETY.

Austin, M. L., Montalba.
Barnes, F. M., Montalba.
Converse, E. V., Palestine.
Dawson, J. W., Brushy Creek.
*Dunlap, R. W., Palestine.
Dunn, R. M., Palestine.
Funderburk, W. O., (Pres.), Palestine.
Freundlich, Thos., Palestine.
Haggard, F. N., Palestine.
Hathcock, A. L., Palestine.
Howard, G. R., Palestine.
Jameson, W. G., Palestine.
Linder, E. L., Tennessee Colony.
Link, E. W., Palestine.
Link, H. R., Palestine.
McLeod, R. H., Palestine.
*Nash, C. C., Palestine.
Outlaw, E. M., Longview.
Parsons, E. B., (Sec.), Palestine.
Paxton, J. H., Elkhart.
Rose, E. L., Palestine.
Scarbrough, E. H. Brushy Creek.
Seale, J. T., Neches.
Tucker, J. J., Cayuga.

ANGELINA COUNTY MEDICAL SOCIETY.

Beasley, J. L., Pollock.
Bledsoe, R. B., Lufkin.
Bullett, S. W., Huntington.
Canon, R. T., Lufkin.
Chapman, J. H., Lufkin.
Childress, D. M., (Pres.), Lufkin.
Clark, E. T., Keltys.
Currie, B. F., Burke.
Denman, L. H., Lufkin.
Dunn, W. W., Lufkin.
Forrest, R. B., Huntington.
Gibson, B. F., Lufkin.
Hawkins, J. W., (Sec.), Lufkin.
Mann, D. A., Diboll.
McCall, H. L., Pollock.
Stewart, C. B., Huntington.
Taylor, T. A., Lufkin.
Van Nuys, J. C., Lufkin.
Wood, G. B., Huntington.

CHEROKEE COUNTY MEDICAL SOCIETY.

Barnett, G. W., Jacksonville.
Barron, W. P., Rusk.
Beall, J. E., Pearsall.
Bone, J. N., Jacksonville.
Canon, M. B., Jacksonville.
Cobble, T. H., (Sec.), Rusk.
Cowan, M. B., Dialville.
*Crawford, J. M., Alto.
Francis, C. C., (Pres.), Alto.
*Fuller, Frank, Jacksonville.
Greenwood, J. T., Lone Star.
*Guinn, E. E., Jacksonville.
Johnson, J. F., Rusk.
Jones, Ed., Jacksonville.
May, J. E., Alto.
Maness, F. G., Rusk.
McClure, M. E., Alto.
McDonald, W. R., Alto.

Moore, John, Dialville.
Moseley, E. M., Rusk.
Priest, R. C., Rusk.
Ramsey, J. B., Forest.
Rather, S. S., Jacksonville.
*Smith, Wiley, Gallatin.
Sorey, W. H., Jacksonville.
Stokes, W. B., Jacksonville.
Travis, J. M., Jacksonville.
Turner, R. G., Alto.

FREESTONE COUNTY MEDICAL SOCIETY.

Davidson, J. D., Donie.
Harrison, W. P., Teague.
Headlee, E., (Pres.), Teague.
Headlee, E. V., (Sec.), Teague.
Johnson, J. E., Mexia.
Peyton, F. P., Teague.
Seale, J. J., Teague.
Sneed, J. E., Teague.
Sneed, W. N., Sr., Fairfield.
Sneed, W. N., Jr., Fairfield.
Suttle, W. A., Freestone.

HENDERSON COUNTY MEDICAL SOCIETY.

Baugh, J. E., Poyner.
*Beach, D. B., Athens.
*Beach, W. W., Malakoff.
Easterling, A. H., (Sec.), Athens.
*Fowler, J. A., Malakoff.
Hodge, R. H., Athens.
Hodge, J. C., Athens.
Horton, A. C.,————
Huddle, E. F., (Pres.), Murchison.
Larkin, Percy, Athens.
Moon, G. F., Chandler.
*Pulley, L. W., Trinidad.
Richardson, Wm., Athens.
Wallace, E. C., La Rue.
Webster, J. K., Athens.
West, J. W., Murchison.

HOUSTON COUNTY MEDICAL SOCIETY.

Beeson, S. P., Weldon.
Briscoe, S. M., Lovelady.
*Collins, W. B., Austin.
Dean, J. N., Lovelady.
Elliott, B. S., Crockett.
Evans, C. W., Crockett.
Kennedy, Sam'l, Grapeland.
Latham, W. W., (Sec.), Crockett.
Lipscomb, W. C., Crockett.
Lipscomb, W. N., Crockett.
Meriwether, L., Crockett.
Nelson, J. H., Weldon.
Scruggs, J. T., Creek.
Sharp, W. S., Neame, La.
Skipper, R. W., Lovelady.
Smith, C. O., Ratcliff.
Stafford, P. H., Grapeland.
Stokes, E. B., Crockett.
Taylor, G. R., Crockett.
Turner, J. B., Jr., Lovelady.
Westmoreland, J. P., Madisonville.
Wooters, J. S., Crockett.

LEON COUNTY MEDICAL SOCIETY.

Balke, J. W., Evansville.
Bell, J. F., Oakwood.
Blount, R. T., Jewett.
Boggs, E. O., Marquez.
*Bond, J. W., Donie.
*Briggs, H. A., (Sec.), Buffalo.
Brown, S. M., Keechie.
Burroughs, S. R., (Pres.), Buffalo.
*Carrington, D. C., Marquez.
Cole, W. A., Normangee.
Connor, P. J., Normangee.
Davidson, N. A., Buffalo.
Haynie, W. M., Buffalo.
Joyce, J. H., Buffalo.
Montgomery, D. W., Concord.
Murdock, E. P., Oakwood.
*Powell, E. P., Centerville.
Seale, W. H., Marquez.
*Rogers, Joe, Normangee.
*Ross, O. W., Leona.
Smith, V. L., Jewett.
Spruiell, Z. J., Jewett.
*Woods, J. P., Buffalo.

PANOLA COUNTY MEDICAL SOCIETY.

Baker, A. M., (Sec.), Carthage.
Baker, C. D., DeBerry.
Copeland, A. G., Gary.
Hull, C. F., Carthage.
Neal, J. S., Carthage.
Ross, H. A., Carthage.

RUSK COUNTY MEDICAL SOCIETY.

Birdwell, J. A., Overton.
Dawson, C. A., Minden.
Deason, Tim, Henderson.
Deason, G. A., Kilgore.
Galloway, A. H., Laneville.
*Jones, W. A., Kilgore.
Motley, J. G., Overton.
Osborne, W. M., Pinehill.
Parish, Irving, Tatum.
Richardson, D. P., Henderson.
Ross, J. E., Henderson.
Sadler, J. G., Henderson.
*Shepherd, W. F., Henderson.
Smith, A. O. L., Henderson.
Spivey, J. H., Henderson.
Stroud, A. D., Henderson.
Watkins, J. E., (Pres.), Henderson.
*White, W. P., (Sec.), Henderson.
Watkins, R. O., Pinehill.

SMITH COUNTY MEDICAL SOCIETY.

Arthur, B. L., Lindale.
*Baldwin, A. P., Tyler.
Bell, B. F., Tyler.
Bell, G. G., (Pres.), Tyler.
Braly, D. B., Troup.
Brogan, W. P., Tyler.
*Bundy, D. T., Tyler.
Cain, W. R., Tyler.
Calloway, A. N., Tyler.
Chambers, B. F., Bullard.
Clark, C. B., Troup.
*Ferrell, Hubert, Tyler.
*Ferrell, J. Z., Tyler.
Gibson, J. W., Lindale.
Hall, C. E., Lindale.
Hunter, R. H., Bullard.
Lacy, W. S., Tyler.
Montgomery, J., Gorden Valley.
Phillips, J. D., Tyler.
Pope, Irvin, Tyler.
Smith, J. C., Winona.
Smith, L. E., Tyler.
Thompson, T. W., Sand Flat.
Tenney, L. P., (Sec.), Troup.
*Vaughan, E. H., Tyler.
*Walker, U. G. M., Flint.
Wisdom, H. H., Swan.
*Woldert A., Tyler.

TRINITY COUNTY MEDICAL SOCIETY.

Barnes, G. R., (Pres.), Trinity.
Barnes, F. L., Houston.
Blair, J. M. D., Trevat.
Bradley, C. H., Groveton.
*Conley, J. W., Saron.
Devine, I. N., Groveton.
Ellis, J. C., Westville.
Magee, Wm. J., Groveton.
Miles, W. S., Pennington.
Pope, W. H., Sr., Trinity.
*Pope, W. H., Jr., (Sec.), Trinity.
Poston, M. C. Crete.

TWELFTH OR CENTRAL DISTRICT.

Dr. A. C. Scott, Temple, Councilor.

BOSQUE COUNTY MEDICAL SOCIETY.

Alexander, J. H., Meridian.
Blankenship, W. W., Mosheim.
*Burnett, J. H., Kopperl.
Cate, C. C., (Sec.), Morgan.
Coston, T. C., Womack.
Garrett, J. C., Valley Mills.
Glass, J. T., Clifton.
*Goodall, C. L., (Pres.), Valley Mills.
*McNeil, W. T., Valley Mills.
Ezell, U. D., Kopperl.
*Pike, A. N., Iredell.

BELL COUNTY MEDICAL SOCIETY.

Alsup, A. H., Little River.
Barton, R. W., Temple.
Barbee, J. A., Oenaville.
*Barton, W. H., Temple.
Baugess, J. B., Heidenheimer.
Benson, C. W., Bartlett.
*Brindley, G. V., Temple.
Burns, E. J., Temple.
*Chapman, M. L., Temple.
Chernosky, W. A., Oenaville.
Crain, A. B., Belton.
Curtis, R. R., Rogers.
Denman, J. A., Belton.
Ellis, I. D., Troy.
*Ellis, J. W., Killeen.
*Etter, W. F., Rogers.
*Frazier, J. M., Belton.
Gober, O. F., Temple.
Gooch, J. M., Temple.
*Goddard, C. W., Holland.
Griffin, I. A., Salado.
*Griffin, M. D., Salado.
Hamblen, W. H., Holland.
Harland, W. J., Bartlett.
Hudson, Taylor, Belton.
Jenkins, J. G., Belton.
*Kimmins, R. L., Temple.
*Kindley, G. C., Temple.

Knight, Lee, Temple.
Lee, B. F., Temple.
Malloy, Ed., Temple.
*Mayo, O. N., Belton.
Mayo, S. L., Belton.
*McCelvey, J. S., Temple.
McDavitt, Bertha, Temple.
McElhannon, M. P., Belton.
*McReynolds, G. S., Temple.
Noble, R. W., Temple.
Odem, J. A., Rogers.
Payne, L. S., Troy.
Pollok, L. W., Temple.
*Potter, Claudia, Temple.
Power, C. L., Temple.
Queen, D. W., Temple.
*Randolph, V. P., Walburg.
*Robinson, J. E., Temple.
*Schenck, C. P., Temple.
*Scott, A. C., Temple.
*Sharp, M. R., Granger.
*Sherwood, M. W., Temple.
Smart, M. P., Eddy.
Smith, W. H., Heidenheimer.
Spivey, W. E., Belton.
Stoeltje, E. C., Oenaville.
*Sutton, R. S., Bartlett.
Sypert, J. R., Holland.
Talley, L. R., (Sec.), Temple.
*Terrill, J. J., (Pres.), Temple.
*Thomas, J. C., Taylor.
*Thomas, G. T., Rogers.
Watts, S. A., Pendleton.
*White, R. R., Temple.
*Whigham, W. E., Pendleton.
*Wilson, R. T., Temple.
*Woodson, J. M., Temple.

COMANCHE COUNTY MEDICAL SOCIETY.

Applewhite, J. W., Gustine.
Blackwell, E. C., Sipe Springs.
Brown, J. P., Gustine.
Carson, J. W., Comanche.
Chilton, P. H., San Antonio.
Clemons, I. T., Comanche.
Duke, E. W., Sipe Springs.
Eargle, J. H., Lampkin.
*Gray, A. J. (Pres.), Comanche.
*Hays, P. G., Sidney.
Hilley, W. M., Sidney.
Inzer, H. H., De Leon.
Neal, A. M., Comanche.
Ory, C. W., (Sec.), Comanche.
Self J. E., De Leon.
Stricklin, M. L., Gustine.
*Thomas, L. B., Comanche.
Vineyard, A. E., Comanche.
*Weaver, T. P., De Leon.
*Westbrook, W. J., Sipe Springs.

CORYELL COUNTY MEDICAL SOCIETY.

Ammons, H. R., Turnersville.
*Bailey, R., Gatesville.
*Baker, E. B., Gatesville.
Bellamy, Chas. L., Turnersville.
*Boyer, C. A., Copperas Cove.
Brown, Rebel J., Ruth.
Crawford, C. H., Pidcoke.
*Graves, Ed., (Sec.), Gatesville.
Hall, T. M., Osage.
Haynes, H. M., Gatesville.
Homan, D. C., Oglesby.
Jordan, D. M., (Pres.), Oglesby.
Lowery, M. W., Gatesville.
*Martin, C. J., The Grove.
*Newland W. B., Gatesville.
Raby, R. L., Gatesville.
*Shipman, Ed. D., Purmela.
*Smith, E. G., Gatesville.
*Wheeler, J. S., Coryell.

ERATH COUNTY MEDICAL SOCIETY.

Barnett, H. N., Dublin.
Binnie, Chas., Thurber.
Bryan, T. F., (Pres.), Dublin.
*Chunn, R. D., Lingleville.
*Copeland, J. A., Lingleville.
*Cragwell, A. O., Stephenville.
Dorsett, D. H., Thurber.
*Farmer, T. J., Dublin.
Gordon, J. B., Stephenville.
*Greenwood, T. M., Bluff Dale.
Laird, T. J., Dublin.
*Lankford, A. E., Stephenville.
Mulloy, N. T., Dublin.
*Mulloy, J. J., Stephenville.
Murray, W. C., Alexander.
Musgrove, J. S., Huckabay.
*Naylor, S. D., (Sec.), Stephenville.
Sessums, J. R., Dublin.
Shepard, O. H., Morgan Mill.
Winters, E. S., Dublin.

FALLS COUNTY MEDICAL SOCIETY.

*Allen, W. H., Marlin.
*Aycock, R. F., Rosebud.
Aycock, F. E., Rosebud.
*Brook, D. H., Travis.
*Buie, N. D., Marlin.
Burdick, H., Lott.
*Curry, H. P., (Pres.), Reagan.
*Hampshire, G. H., Kosse.
*Hayes, M. A., Lott.
Jansing, B. A., Lott.
King, F. B., Lott.
*Rice, S. P., Marlin.
Shankle, W. M., Chilton.
Sewell, F. B., Marlin.
Shaw, Frank, Marlin.
Streit, Aug. J., (Sec.), Marlin.
*Torbett, J. W., Marlin.
Torbett, Oscar, Marlin.
Ward, B. G., Marlin.
Whiteside, R. B., Lott.
Whitten, S. D., Marlin.

HAMILTON COUNTY MEDICAL SOCIETY.

Agee, William, Agee.
Bolding, W. T., Hamilton.
*Boone, M. A., Hamilton.
*Chandler, C. E., Shive.
Colwick, O. J., Cranfill Gap.
Coston, G. M., Aleman.
Currie, J. D., Hico.
*Durham, C. E., (Pres.), Hico.
Everitt, W. B., Hamilton.
Gooch, J. W., Indian Gap.
*Hall, C. M., Hico.
*Hartman, V. A., Evant.
Hobdy, Will, Hamilton.
Hubbert, W. E., Dallas.
McMordie, W. E., Hamilton.
Pluenneke, P. C., Cranfills Gap.
Risinger, M. M., Chalk Mountain.
Thompson, J. M., Ireland.
Winn, J. B., Hamilton.
Wysong, J. H., (Sec.), Hico.
Yarbrough, E. E., Indian Gap.

HILL COUNTY MEDICAL SOCIETY.

Barnes, L., Hubbard.
*Boyd, J. E., (Sec.), Hillsboro.
*Brian, M. W., Hillsboro.
Buie, Jas. S., Hillsboro.
Buie, John, Hillsboro.
Carpenter, B. R., Malone.
Cupp, Chas. D., Hillsboro.
Davis, C. C., Hillsboro.
Dean, T. R., Whitney.
Douglass, F. M., Itasca.
*Dunn, J. B., Hubbard.
Faulkner, C. F., Whitney.
Fuller, H. H., Hillsboro.
*Gilbert, A. J., Hillsboro.
Hartsfield, T. M., Covington.
Harwood, M. P., Hubbard.
Hendrix, J. H., Bynum.
Hill, W. R., Aquilla.
*Hoke, H. E., Hubbard.
*Holland, J. T., Itasca.
Hunt, J. D., Hillsboro.
*Hunt, T. E., Hillsboro.
*Ivy, H. T., Whitney.
Jenkins, I. W., Penelope.
Jenkins, W. M., Penelope.
*Lingo, A. J., Whitney.
Lowery, W. W., Hillsboro.
*Mahaffey, H. A., Hillsboro.
Martin, J. B., Brandon.
McKown, J. S., Osceola.
McPherson, A. B., Lovelace.
*Miller, Jas. W., (Pres.), Hillsboro.
*Montgomery, Geo. L., Aquilla.
Price, Sterling, Mertens.
Robert, Jas. J., Hillsboro.
Roberts, L. C., Malone.
Robinson, M. L., Hubbard.
*Robison, D. K., Itasca.
Saylors, A. C., Bynum.
Sims, F. D., Abbott.
*Shoemaker, L. F., Hillsboro.
*Smith, B. C., Brandon.
Smith, B. T., Hillsboro.
Spaulding J. W., Hillsboro.
*Speer, J. A., Itasca.
Spring, N. W., Itasca.
Stevenson, H. H., Irene.
Treat, W. F., Whitney.
Vaughan, B. H., Hillsboro.
*Vaughan, E. P., Hillsboro.
*Ward, E. D., Blum.
*Weir, W. C., Aquilla.
Webb, J. B., Abbott.
Weir, R. R., Itasca.
*Wood, W. A., Hubbard.
*Wornel, J. M., Blum.
*Youngblood, D. J. R., Brandon.

HOOD-SOMERVELL COUNTY MEDICAL SOCIETY.

Collins, F. A., Acton.
*Dabney, T. H., Granbury.
*Gibbs, L. P., Glen Rose.
*Jarrett, A. R., Granbury.
Lancaster, J. R., Granbury.
*McCallon, A. B., Cresson.
McCuan, J. M., Mambrino.
*McFall, J. W., Lipan.
*Menefee, E. L., Granbury.
*Morgan, E. H., Granbury.
Perkins, W. F., Tolar.

Price, E. C., Capitan.
Pruitt, W. B., Georges Creek.
*Ross G. D., (Sec.), Paluxy.
*Wilder, H. L., Glen Rose.

JOHNSON COUNTY MEDICAL SOCIETY.

Alexander, W. P., Cleburne.
*Anderson, C. C., Venus.
*Ball, W. P., (Pres.), Cleburne.
Blackwell, J. M., Godley.
*Cahill, M. C., Lillian.
*Cooke, C. C., Keene.
Cooke, F. D., Alvarado.
*Colquitt, L. A., Rio Vista.
*Crabtree, B. F., Godley.
Dennis, M., Cleburne.
Easterwood, A. Y., Cleburne.
*Edgar, C. L., (Sec.), Cleburne.
*Farrar, Mary, Cleburne.
Fountain, W. D., Saratoga.
*Garner, A. F., Grandview.
Harris, L. L., Cleburne.
*Harris, R. L., Cleburne.
*Honea, T. C., Cleburne.
*Jones, E. L., Bremerton.
*Knox, M. T., Parker.
*Lee, J. P., Venus.
*McNairn, S. P., Burleson.
*Meason, J. M., Rio Vista.
*Menefee, W. E., Cleburne.
*Osborn, J. D., Cleburne.
*Paine, W. H., Burleson.
*Pearson, J. I., Joshua.
*Prestridge, B. G., Alvarado.
Price, L. W., Cleburne.
Roark, R. H., Cleburne.
*Rucker, J. D., Cleburne.
*Russell, C. E., Venus.
*Schultz, C. A., Alvarado.
*Self, T. N., Cleburne.
Selmon, J. T., Joshua.
*Shytles, T. J., Venus.
Shytles, W. M., Terrell.
Stallcup, J. M., Bono.
Strickland, D., Cleburne.
*Turner, B. H., Cleburne.
Washburn, W. R., Cleburne.
Yater, A. D., Cleburne.
*Yater, Lee, Cleburne.
*Yater, T. F., Godley.

LIMESTONE COUNTY MEDICAL SOCIETY.

*Armstrong, F. G., Delia.
Bedford ,W. O., Thornton.
*Blalock, W. C., Kosse.
*Brooks, W. N., Groesbeck.
*Brown, Marion M., (Sec.), Mexia.
*Cox, J. W., (Pres.), Groesbeck.
Driver, J. S., Cooledge.
Ezell, B. S., Kosse.
Ezell, E. T., Kosse.
*Holton, B. F., Kirk.
Holton, T. J., Groesbeck.
*Jackson, A. A., Mexia.
Jackson, R. B., Mexia.
*Jackson, R. W., Tehuacana.
Leach, R. N., Big Hill.
*McLendon, T. P., Wortham.
Moore, J. F., Cooledge.
Oates, T. F., Mexia.
Rawls, J. W., Thornton.
Russell, W. R., Mart.
Thomas, E. E., Frosa.
Welch, T. A., Groesbeck.

MILAM COUNTY MEDICAL SOCIETY.

Barkley, T. S., Rockdale.
Best, E. E., (Pres.), Cameron.
Cates, W. R., Thorndale.
*Coulter, H. T., Rockdale.
Crawford, J. L., Burlington.
Denson, J. L., Cameron.
Denson, W. A., Ben Arnold.
Dollar, J. M., Gause.
Epperson, A. S., Cameron.
Fontains, W. J., Jones Prairie.
Gray, D. F., Gause.
Greer, W. W., Cameron.
Holley, A. S., San Gabriel.
Hubert, J. S., Calvert.
*Kirkland, L. W., Milano.
Kirkpatrick, S. B., Rockdale.
Lawrence, E. L., Thorndale.
Lee, L. L., Thorndale.
Lyon, W. H., Rockdale.
McGee, D. B., Cameron.
Monroe, D. E., Cameron.
*Mullins, G. W., Milano.
Newton, W. R., Cameron.
Page, J. A. T., Baileyville.
Reisher, Edgar, Cameron.
Reismyer, L. T., Thorndale.
Sapp, M. C., Cameron.
Taylor, G. B., (Sec.), Cameron.
Wallis, R. N., Rockdale.
Young, J. Z., Buckholts.

McLENNAN COUNTY MEDICAL SOCIETY.

*Alexander, R. J., Waco.
*Aynesworth, K. H., (Pres.), Waco.
*Aynesworth, H. T., Waco.
Baird, T. H., Otto.
Baker, M. D., Waco.
Ballard, S. E., Waco.
Barrett, H. E., Mt. Calm.
Bell, R. B., Waco.
*Black, H. C., Waco.
Blailock, Harry F., McGregor.
Brannan, E. C., Waco.
Brooks, C. H., Waco.
Brown, J. B., McGregor.
Brown, R. C., Waco.
Brown, J. W., Pearsall.
*Brumby, W. M., Waco.
*Burgess, J. L., Waco.
*Cannon, I. F., Mart.
*Cole, W. F., Waco.
*Colgin, I. E., Waco.
Colgin, M. W., Waco.
Collins, C. E., Waco.
Collum, C. C., Mart.
*Compton, W. J., Crawford.
Conally, W. P., McGregor.
Conger, R. E., China Springs.
*Connally, H. F., Waco.
Cook, J. E., Mart.
Craven, A. R., Waco.
*Crosthwait, W. L., Waco.
Curran, W. F., Waco.
*Curtis, A. M., Waco.
*Davis, C. W., Waco.
Dean, Jesse J., Waco.
Dudgeon, H. R., Waco.
Eanes, R. H., Waco.
Earle, Hallie, Hewitt.
*Eastland, D. L., (Sec.), Waco.
Elliott, O. C., Elm Mott.
Ferrell, J. R., Waco.
*Fosque, G. B., Waco.
Foster, J. D., Reisel.
Gage, S. C., Waco.
Gebhard, A. G., Waco.
Germany, H. J., Speegleville.
*Gidney, J. W., West.
Gilliam, J. R., Mart.
Graves, J. H., Waco.
Grice, T. W., South Bosque.
Hale, J. W., Waco.
Herrington, Lee R., Reisel.
Harrington, J. T., Waco.
*Hodges, E. D., Waco.
Jones, S. Ross, Waco.
Jennings, W. L., Mart.
Langford, M. L., Mart.
*Langston, I. A., E. Waco.
*Lanham, H. M., Waco.
*Lingsweiler, H. W., Pearl.
Lovelace, Carl, Waco.
Lovelace, J. D., Speegleville.
*Lucy, W. E., Eddy.
Magee, W. E., Bruceville.
Maxfield, J. R., Waco.
*McCauley, E. R., Moody.
McCormick, R., Waco.
*McGlasson, I. L., Waco.
Miles, T. F., Lorena.
Miller, Garnett, Moody.
*Monk, J. A., Kempner.
Murphey, P. C., Waco.
*Nail, W. R., Crawford.
Naylor, L. F., Waco.
*Nutter, R. B., Waco.
Olive, N. A., Waco.
Rand, B. H., Bruceville.
Roddy, L. H., Waco.
Saunders, M. B., Waco.
Schreier, A. R., West.
Schreier, Lena F., West.
Scott, B. L., Waco.
Shelton, S. E., Waco.
Shipp, W. F., Lorena.
Smith, C. E., Mart.
Smith, Ed., Waco.
Snodgrass, S. E., West.
Souther, W. L., Waco.
Spencer, Aleck, Waco.
*Tabb, T. E., Hewett.
Thomas, J. H., West.
Toomin, Emanuel, Waco.
Trice, W. G., Aquilla.
Wedemeyer, E. L., Mart.
*Whigham, J. G., Moody.
Wilcox, Wallace, Bosqueville.
Wilkes, W. O., Waco.
Witt, Guy F., Waco.
*Witt, J. M., Waco.
Witte, W. S., Waco.
Womack, J. H., Waco.
Wood, R. S., Waco.
Young, J. B., Waco.
Zvesper, J. S., West.

NAVARRO COUNTY MEDICAL SOCIETY.

Bowmer, O. C., Rice.
Bristow, W. C., Emhouse.
Brown, B. S., Kerns.
Burnett, S. H., Corsicana.
Carter, J. T., Rice.
*Cross, W. D., (Sec.), Corsicana.
Currie, D. B., Kerenes.
*Daniel, J. S., Corsicana.
David, J. W., Corsicana.

*Edgar, J. H., Richland.
Ellis, W. M., Blooming Grove.
Ellis, E. B., Purdon.
*Frey, J. H., Corsicana.
*Fountain, W. D., Corsicana.
*Fryar, T. V., Dallas.
Hamilton, J. J., Corsicana.
Hanks, M. L., Corbet.
*Hill, B. W. D., Dawson.
*Hofstetter, G. A., Corsicana.
Houston, B. F., Corsicana.
*Jenkins, A. B., Hubbard City.
Jester, H. B., Corsicana.
*Jones, J. A., Corsicana.
Kelton, L. E., Corsicana.
Liddell, G. M., Purdon.
Lowery, E. B., Corsicana.
*Matlock, Jno. W., Frost.
McClung, J. E., (Pres.), Corsicana.
*McDaniel, W. O., Streetman.
McMullan, H. R., Roan.
Miller, T. A., Corsicana.
Newbern, C. L., Barry.
Newton, E. H., Corsicana.
Price, Don, Wilmer.
Robertson, Wm. H., Frost.
Sadler, T. B., Corsicana.
Sanders, A. D., Purdon.
Shell, W. T., Corsicana.
Slater, T. S., Navarro.
Sloan, Hugh, Rice.
*Sneed, K. W., Wortham.
*Stevens, J. C., Richland.
Suttle, I. N., Corsicana.
Walker, W. H., Winkler.
Worsham, J. P., Emhouse.

ROBERTSON COUNTY MEDICAL SOCIETY.

Alexander, S. J., Hearne.
Black, Jno. W., Hearne.
*Bradford, C. C., Franklin.
Brittain, Edgar, Bremond.
Cearnals, C. D., Mumford.
Collard, F. R., Jr., Mumford.
Collard, F. R., Sr., Wheelock.
*Cummings, H. W., Hearne.
Curry, T. G., Franklin.
Gilson, F. J., Calvert.
Gilstrap, W. P., Wheelock.
Holman, J. C., Franklin.
Miles, Joe, New Baden.
Parker, W. S., (Pres.), Calvert.
*Sharp, A. J., (Sec.), Franklin.
Smith, T. T., Bald Prairie.
Steele, J. E., Franklin.
Stoeltje, F. J., Wooten Wells.
Taylor, W. C., Calvert.
Vaughan, W. R., Calvert.

THIRTEENTH OR NORTHWESTERN DISTRICT.

Dr. C. B. Williams, Mineral Wells, Councilor.

BAYLOR COUNTY MEDICAL SOCIETY.

Bunkley, J. F., (Pres.), Seymour.
Burnett, T. F., Seymour.
Johnson, C. F., Seymour.
*Johnson, C. E., (Sec.), Seymour.
*McLemore, J. T., Round Timber.
Ratliff, J. D., Seymour.
Richardson, J. A., Seymour.
Pistole, S. W., Seymour.

CLAY COUNTY MEDICAL SOCIETY.

*Allison, J. A., Henrietta.
Buchanan, J. T., Shannon.
*Calhoun, J. S., (Pres.), Henrietta.
Carmen, E. M., Buffalo Springs.
*Crook, L. F., Bellevue.
*Ferris, J. H., Henrietta.
Greer, Albert, Henrietta.
*Hilbourn, R. E., Antelope.
*Moffett, J. E., Bluegrove.
*Shackelford, C. E., Henrietta.
*Puckett, B. M., (Sec.), Henrietta.
Whitmore, J. D., Henrietta.

EASTLAND COUNTY MEDICAL SOCIETY.

Blackwell, G. T., Gorman.
Brittain, B. B., Putnam.
*Britton, J. M., Cisco.
Busbee, T. B., Rising Star.
*Dill, J. R., Rising Star.
*Gregory, J. W., Cisco.
*Griffin, L. L., Cisco.
Guy, W. H., Carbon.
Howell, J. W., Lyra.
Jackson, L. L., Thurber.
*Johnson, J. L., Eastland.
*Lee, W. P., (Sec.), Cisco.
*Leggett, C. B., Gorman.
Leek, A. B., Moran.
*Montgomery, J. E., Rising Star.
*Nicks, J. M., Ranger.
Patterson, Thos. Rising Star.
Parks, A. J., Eastland.
Pierce, T. L., Carbon.
Rush, R. H., Gorman.
*Shackelford, J. A., Thurber.
Shepherd, F. D., Eastland.
*Terrell, C. O., Ranger.
Terry, B. F., Rising Star.
Wilson, B. F., Carbon.

PARKER-PALO-PINTO COUNTY MEDICAL SOCIETY.

Ayers, D. F., Poolville.
*Baldridge, W. H., Mingus.
Baldwin, W. S., Mineral Wells.
*Beeler, B. R., (Pres.), Mineral Wells.
*Boaz, E. H., Aledo.
Brown, J. D., Fort Worth.
*Bursey, E. H., Weatherford.
*Campbell, W. M., Weatherford.
*Chandler, J. N., Weatherford.
*Davis, E. A., (Sec.), Mineral Wells.
*Eastland, J. H., Mineral Wells.
Garrett, A. S., Springtown.
Houx, I. F., Gordon.
*Irby, Alf, Weatherford.
Jones, G. M., Springtown.
Kuykendall, A. R., Weatherford.
*Leach, H. F., Weatherford.
Lindsay, L. A., Whitt.
Luttrell, J. M., Mineral Wells.
*McCracken, J. H., Mineral Wells.
*McCorkle, J. H., Gordon.
*McNelly, Chas., Weatherford.
*Mincey, J. N., Mineral Wells.
*Mitchell, J. H., Graford.
Pyle, J. N., Mineral Wells.
Simmons, P. R., Weatherford.
*Smith, R. H., Palo Pinto.
Sublet, J. W., Peaster.
*Thomas, W. M., Mineral Wells.
Thompson, M., Brock.
Wagley, H. F., Mineral Wells.
Whatley, H. P., Mineral Wells.
*Williams, C. B., Mineral Wells.

STEPHENS COUNTY MEDICAL SOCIETY.

*Ball, J. H. (Sec.), Crystal Falls.
Brockman, James O., Nez Perse, Idaho.
*Evans, A. J., (Pres.), Caddo.
Lyday, A. T., Eolian.
Morris, H. W., Wayland.
*Rhodes, B. F., Breckenridge.
*Wharton, J. W., Breckenridge.

THROCKMORTON COUNTY MEDICAL SOCIETY.

Anderson, A. M., Throckmorton.
Berry, W. L., Elbert.
Hardy, L. H., Throckmorton.
King, J. E., Throckmorton.
*Turner, C. A., (Pres.), Doodson.
Wylie, D. C., (Sec.), Throckmorton.

YOUNG COUNTY MEDICAL SOCIETY.

*Duncan, R. A., Graham.
*Gant, C. B., Graham.
*Griffin, H. E., Graham.
Hamilton, G. B., Olney.
Logan, W. H., (Sec.), Graham.
*McCoy, R. L., Megargel.
McKinney, H. C., Olney.
McNeil, W. L., Graham.
Marrs, J. B., Newcastle.
Terrell, Wm., Graham.
Vaughter, H. D., Megargel.
Webb, W. G., Megargel.
*Weems, H. K., Jean.

JACK COUNTY MEDICAL SOCIETY.

*Huckabay, F. G., Jacksboro.
*Hughes, E., Bryson.
*Key, H. H., Jacksboro.
*McCloud, B. L., Bryson.
*McCloud, T. C., Jermyn.
Wade, G. B., Jacksboro.
Woods, L. B., (Sec.), Jacksboro.
*Woods, D. R., Perrin.
*Winstead, L. A., Jermyn.

FOURTEENTH OR NORTHERN DISTRICT.

Dr. A. W. Carnes, Hutchins, Councilor.

COLLIN COUNTY MEDICAL SOCIETY.

Bates, T. G., Anna.
*Boorman, T. G., Celina.
*Brooks, P. F., Wylie.
Bristo, P. M., Westminister.
Blythe, E. S., Allen.
Bryant, W. C., Anna.
Bryant, A. T., McKinney.
*Burton, E. L., McKinney.
Burt, J. D., Farmersville.
Castner, C. W., Lavon.
*Collins, J. S., Weston.
Cory, A. C., Copeville.
Davis, W. J., Anna.
*Ellis, W. D., Plano.
Erwin, J. C., McKinney.
Frechet, E. A., Frisco.

Gibson, J. E., McKinney.
Harris, W. G., Plano.
Hicks, J. H., Farmersville.
Houston, D. F., McKinney.
Largent, W. T., McKinney.
Largent, B. F., McKinney.
Manning, W. N., Westminister.
Mantooth, J. T., Altoga.
*Mathers, W. R., Prosper.
Maxwell, I. L., Wylie.
*Maynard, G. P., Wylie.
*Mendenhall, J. N., Plano.
Metz, M. S., McKinney.
*Morrow, R. E., Lucus.
Rucker, W. E., McKinney.
Staples, T. O., Wylie.
Walker, R. N., Celina.
Wolford, W. F., Allen.
Wysong, W. S., McKinney.
Yeary, D. M., Farmersville.

COOKE COUNTY MEDICAL SOCIETY.

Bailey, R. H., Portales, N. M.
Cunningham, O. W., Valley View.
*Dawson, J. L., Valley View.
Dudley, J. B., Marysville.
*Gilcreest, J. E., Gainesville.
Gilcreest, E. L., Gainesville.
Harper, J. R., Rosston.
*Higgins, D. M., Gainesville.
Hughes, C. T., Gainesville.
Hughes, R. E., Gainesville.
*Jennett, J. G., Gainesville.
Johnson, W. M., Rosston.
*Johnson, C. R., (Pres.), Gainesville.
Kelley, W. N., Era.
*Kuser, L. W., Gainesville.
*Lewis, J. R., (Sec.), Gainesville.
*Maxwell, C. L., Myra.
*McIver, Julius, Gainesville.
Palmer, J. W., Sivells Bend.
*Parrish, E. M., Gainesville.
*Parrish, C. C., Gainesville.
Price, W. J., Gainesville.
*Rice, C. F., Gainesville.
*Thayer, C. B., Gainesville.
*Whiddon, R. C., Gainesville.
Wilson, R. S., Gainesville.

DALLAS COUNTY MEDICAL SOCIETY.

*Austin, J. L., Rockwall.
Austin, Florence, Dallas.
Arnold, T. L. E., Dallas.
*Baird, R. W., Dallas.
*Baker, W. T., Dallas.
*Beddoe, A. F., Dallas.
Bettison, D. L., Dallas.
*Blailock, W. R., Dallas.
*Black, C. C., Royse.
*Black, J. H., Dallas.
*Blair, J. C., Dallas.
*Bland, L. F., Dallas.
*Bourland, J. W., Dallas.
*Boyd, J. M., Dallas.
Boyce, W. A., Dallas.
Brandau, W. W., Dallas.
Brooks, E. J., Eagle Ford.
*Bruce, B. S., Dallas.
*Burnett, E. W., Carrolton.
*Calvert, W. J., Dallas.
*Carlisle, Geo. L., Dallas.
*Carnes, A. W., Hutchins.
*Carrell, W. B., Dallas.
*Carter, J. S., Dallas.
*Cary, E. H., Dallas.
Clay, Henry, Dallas.
*Coble, J. M., Dallas.
*Cole, R. K., Dallas.
Compere, D. E., Dallas.
*Daniels, R. H., Dallas.
*Davis, J. S., Dallas.
Dean, J. H., Dallas.
*Decherd, H. B., Dallas.
Donald, Homer, Dallas.
*Doolittle, H. M., Dallas.
*Dorman, J. H., Dallas.
Doughty, Jewel, Dallas.
Duncan, M. J., Dallas.
*Dunlap, E., Dallas.
*Embree, J. W., Dallas.
*Fisher, T. B., Dallas.
*Flynn, C. W., Dallas.
*Folsom, A. I., Dallas.
*Fortner, A. H., Dallas.
*Fortner, E. S., Dallas.
*Fowler, W. W., Dallas.
*Freedman, S. M., Dallas.
Gambrell, J. H., Dallas.
*Gauldin, R. J., Dallas.
*Gilbert, T. C., Dallas.
*Gordon, E. S., Dallas.
Graves, R. W., Hutchins.
*Greer, B. E., Dallas.
*Grigsby, C. M., Dallas.
*Hackler, G. M., Dallas.
Hale, Wm., Dallas.
Hall, F. J., Dallas.
*Hannah, C. R., Dallas.
Harben, R. P., Dallas.
Hardin, A. D., Dallas.
Hardin, W. B., Dallas.
*Harral, Whitfield, Dallas.
*Hopkins, May Agnes, Dallas.
*Howard, W. E., Dallas.
Hudgins, B. E., Mesquite.
Irvine, E. J., Dallas.
*Jablow, H. B., Dallas.
Jackson, R. R., Dallas.
*Jones, R. R., Dallas.
*Jones, W. D., Dallas.
Jones, A. F., Mesquite.
Johnson, C. L., Dallas.
*Kinsel, Benj., Dallas.
Kolaczkowski, C. G., Dallas.
Knowles, W. M., Dallas.
Lasater, R. H., Mesquite.
Leake, H. K., Dallas.
Levy, H. K., Dallas.
*Lehmann, J. R., Dallas.
Loomis, E. W., Dallas.
*Lott, M. E., Dallas.
Loving, R. S., (Sec.), Dallas.
*Marchman, O. M., Dallas.
*Marshall, J. H., Dallas.
Martin, G. S., Safford, Ariz.
*Martin, J. M., Dallas.
*McBride, R. B., Dallas.
McLaurin, H. L., Dallas.
*McLaurin, J. G., Dallas.
*McReynolds, J. O., Dallas.
Milliken, S. R., Dallas.
*Milliken, S. E., Dallas.
*Millwee, R. H., Dallas.
*Morgan, F. B., Dallas.
*Moore, H. L., Dallas.
Morris, I. J., Dallas.
*Moursund, W. H., Dallas.
Nance, L. M., Dallas.
*Nash, A. W., Dallas.
*Neel, J. M., Dallas.
Newsom, H. G., Dallas.
*Ormsby, F. E., Cement.
Peck, W. M., Dallas.
*Pierce, F. A., Dallas.
*Purser, Thos., Dallas.
Reeves, E. J., Dallas.
*Roberts, J. W., Irving.
*Rosser, C. M., Dallas.
Shortal, W. W., Dallas.
Seeger, W. L., Dallas.
*Seay, D. E., Dallas.
*Shelmire, J. B., Dallas.
Simpson, R. H., Dallas.
*Small, A. B., Dallas.
*Smart, J. H., Dallas.
*Smith, M. M., Dallas.
Smith, J. T., Dallas.
*Smoot, J. B., Dallas.
*Sorrells, C. C., Ryse.
Standifer, C. H., Dallas.
*Stephenson, W. O., Dallas.
*Stone, M. P., Dallas.
Swaim, G. W. B., Dallas.
*Swain, W. C., (Pres.), Dallas.
*Taber, M. E., Dallas.
*Terrell, S. L., Dallas.
Titterington, J. B., Dallas.
*Turner, J. S., Dallas.
*Walcott, H. G., Dallas.
*Watson, J. T., Dallas.
*Webb, Sam, Dallas.
*Wells, J. T., Dallas.
*Whitaker, Harry L., Dallas.
*White, W. T., Dallas.
*Wilkinson, A., Dallas.
*Wright, J. V., Dallas.
*Worley, J. R., Dallas.
Yancy, R. S., Dallas.
Young, W. M., Dallas.

DELTA COUNTY MEDICAL SOCIETY.

Barnett, J. M., Ladonia.
Blair, S. F., Cooper.
Bradford, C. T., Klondike.
Burgess, N. L., Sumner.
*Crook, W. J., Cooper.
Darwin, T. M., Cooper.
DeWitt, R. E., Enloe.
Estep, M. A., Lake Creek.
Forrester, W. H., Klondike.
Janes, O. Y., Cooper.
Lowry, D. O., Cooper.
Taylor, C. C., (Sec.), Cooper.
Warren, W. O., Pecan Gap.
*Westerman, D. B., Charleston.
Wheat, E. B., (Pres.), Cooper.
*Wood, W. A., Charleston.
Wood, L. D., Enloe.
Woodruff, E. E., Cooper.

DENTON COUNTY MEDICAL SOCIETY.

*Allen, T. R., Justin.
*Allen, J. H., Justin.
Archer, W. C., Lewisville.
*Atkins, W. E., Pilot Point.
Bates, E. M., Aubrey.
*Buster, O. C., Pilot Point.
*Fullingim, M. D., Denton.
Gose, J. C., Krum.
*Harris, T. M., Pilot Point.
*Hinkson, David, Argyle.
*Hooper, J. L., Denton.
*Inge, J. M., Denton.
*Jasper, W. C., Denton.
*Kimbrough, W. G., Denton.

*Kimbrough, W. C., (Sec.), Denton.
*Kincaid, Ada, Denton.
*Kirkpatrick, D. F., Lewisville.
*Lain, G. D., Sanger.
*Lipscomb, P., Denton.
*Martin, M. L., Denton.
McBride, M. C., Denton.
McReynolds, S. M., (Pres.), Denton.
Odell, S. P., Stony.
*Rice, J. C., Sanger.
*Rowe, Hill, Denton.
Stover, J. E., Little Elm.
*Swearingen, W. H., Denton.
*Taylor, D. G., Garza.
*Townes, C. B., Sanger.

ELLIS COUNTY MEDICAL SOCIETY.

Aldridge, H. W., Manitowoc, Wis.
*Barnett, T. L., Midlothian.
Berry, J. S., Waxahachie.
*Boyd, W. D., Waxahachie.
*Brown, W. C., Midlothian.
Campbell, W. E., Ennis.
Cheatham, T. H., Waxahachie.
*Clark, L. E., Ennis.
Cook, C. P., Ennis.
Cox, A. J., Ennis.
Daly, T. J., Palmer.
*Forehand, J. F., Bardwell.
*Goddard, G. M., Waxahachie.
*Gough, E. F., (Sec.), Waxahachie.
*Graham, L. H., Waxahachie.
*Grant, W. A., Italy.
Gray, C. E., Ennis.
*Hampton, W. E., Ferris.
*Harris, J. P., Midlothian.
Hall, R. L., Italy.
*Jenkins, F. H., Italy.
Jenkins, E. M., Italy.
Jones, J. E., Boyce.
Loggins, J. C., Ennis.
*McBurnett, C. W., Palmer.
McCall, R. A., Ennis.
*McCall, W. P., Ennis.
Moore, N. L., Palmer.
*Moore, O. E., Midlothian.
*Nifong, H. D., Britton.
Nowlin, J. F., Italy.
*Parnell, L. D., Waxahachie.
Pickett, N. J., Milford.
Pipkin, G. P., Red Oak.
Ponder, Joseph, Kaufman.
Poplin, R. W., Midlothian.
*Rains, J. L., (Pres.), Bardwell.
*Ranspot, R. R., Waxahachie.
*Rogers, J. O., Red Oak.
*Rogers, W. P., Milford.
*Simpson, C. W., Waxahachie.
*Sims, W. P., Waxahachie.
Stoker, G. P., Red Oak.
*Stone, G. W., Waxahachie.
Tate, J. A., Ennis.
*Tenery, W. C., Waxahachie.
Terry, J. S., Ennis.
*Thomas, A. L., Ennis.
*Thompson, D. G., Waxahachie.
Thornton, Z. N., Forreston.
*Tibbs, R. I., Maypearl.
*Tollison, J. W., Bardwell.
Wadley, S. L., Palmer.
*Watson, S. H., Waxahachie.
Weeks, W. B., Maypearl.
White, T. W., Ennis.
Wilson, J. S., Ferris.

FANNIN COUNTY MEDICAL SOCIETY.

Adair, C. C., Bailey.
*Alexander, W. H., Paducah.
*Boyd, D. T., Ector.
Carter, C. S., Savoy.
Carleton, J. C., Bonham.
*Cappleman, J. J., Honey Grove.
Cobb, G. M., Ector.
*Cooksey, T. G., Ravenna.
Cooper, W. A., Windom.
Cravens, W. E., Telephone.
Davis, R. C., Bonham.
Donaldson, H. H., Honey Grove.
Donaldson, J. M., Dodd City.
Duke, T. B., Gober.
Ewing, O. S., Leonard.
Foster, E. H. H., (Sec.), Bonham.
Fulton, S. H., Ladonia.
*Gain, O. O., Dublin.
Gill, Jno. J., Lamasco.
*Gray, C. A., Bonham.
Hampton, N. D., Ector.
Hammond, W. G., Monkstown.
*Joiner, J. C., Honey Grove.
Jones, A. C., Leonard.
*Kennedy, A. B., Bonham.
Lee, R. E., Windom.
*Leeman, H. H., Windom.
*McDaniel, H. A., Bonham.
McGowan, W. J., Leonard.
*Morrow, W. C., Trenton.
Neilson, S. B., Ladonia.
Nesbitt, J. H., Honey Grove.
*Nevill, J. E., Bonham.
*Norman, J. E., Trenton.
Pendergrass, J. J., Leonard.
Rayburn, J. F., (Pres.), Bonham.
*Relyea, S. C., Ladonia.
Richardson, R. W., Gober.
Savage, H. B., Honey Grove.
Snipes, W. G., Ladonia.
Spence, S. E., Dodd City.
Stark, E. H., Ladonia.
*Van Noy, Jno., Dodd City.
Vaughn, W. B., Honey Grove.
Ward, W. Y., Ivanhoe.
*Watkins, L. W., Leonard.

GRAYSON COUNTY MEDICAL SOCIETY.

Acheson, A. W., Denison.
*Ahlers, O. C., (Pres.), Sherman.
Baskett, G. W., Van Alystyne.
*Birch, E. R., Denison.
*Blassengame, A. A., Denison.
Bounds, J. W., Gunter.
Bow, J. L., Whitewright.
Brown, G. F., Sherman.
Brown, H. L., Sherman.
*Carey, J. W., Whitsboro.
*Carraway, J. H., Sadler.
Crowder, T. W., Sherman.
Devine, J. J., Tom Bean.
*Ellis, G. S., Sherman.
Ellis, J. G., Denison.
Ellis, J. G., Jr., Denison.
*Ellis, L. C., Denison.
Freels, A. McD., Denison.
Gardner, A. B., Denison.
Gunby, I. P., Sherman.
Hestand, D. M., Tom Bean.
*Hoard, W. R., Sherman.
Hogan, S. L., Pottsboro.
*Holland, E. E., Sherman.
Holt, J. H., Sherman.
Jackson, Wm., Tom Bean.
*Jamison, D. K., Denison.
Johnson, C. P., Whitewright.
Jones, J. F., Sherman.
Kahn, A. M., Denison.
*King, C. L., Whitsboro.
*Kusch, L., Gay Hill.
*Ledbetter, E. E., Tioga.
Long, T. J., Denison.
Mathews, J. O., Sherman.
May, R., Whitewright.
May, R. R., Whitewright.
*Mayes, J. A., Denison.
McElhannon, A. M., Sherman.
McGregor, C. T., Denison.
McGregor, F. H., Denison.
Millen, S. C., Elm View.
Montgomery, E. P., Whitewright.
Moore, S. D., Van Alstyne.
*Morrison, M. M., Denison.
Neathery, E. J., Sherman.
Neer, E. D., Sherman.
Poe, W. D., Sherman.
*Price, C. D., Whitesboro.
Ridings, A. L., Dorchester.
Ross, D., Denison.
Russell, B. A., Southmayde.
Rutledge, A. V., Denison.
*Schenck, C. E., Sherman.
*Sears, R. L., Whitewright.
Seay, E. L., Denison.
*Shelley, D. C. L., Howe.
Shelley, J. L., Howe.
*Spangler, Davis, (Sec.), Sherman.
*Stein, J. F., Denison.
Stinson, J. B., Sherman.
Swafford, J. A., Sherman.
*Teas, F. M., Denison.
Veazey, Wm., Van Alstyne.
*Williams, E. C., Collinsville.
*Wolfe, J. A. L., Van Alstyne.

HOPKINS COUNTY MEDICAL SOCIETY.

Addy, E. E., Reiley Springs.
*Clark, W. A., Cumby.
*Conner, W. E., Cumby.
Dickerson, J. P., Sulphur Spgs.
Holbrook, J. H., (Sec.), Sulphur Springs.
*Johnson, J. J., Sulphur Springs.
*Long, W. W., Sulphur Springs.
Longino, S. B., Sulphur Springs.
*Smith, O., Cumby.
*Sterling, E., Sulphur Springs.
Sterling, W. C., Sulphur Spgs.
Sutherland, W. S., Sulphur Springs.
Tucker, W. A., Peerless.
*White, F. A., Sulphur Bluff.
Worsham, A. B., Brashear.

HUNT COUNTY MEDICAL SOCIETY.

Allen, C. G., Campbell.
Allen, Jas. G., Commerce.
Arnold, Benj. F., Greenville.
Becton, Edwin P., Greenville.
*Becton, Joe, Greenville.
Benton, Jas. W., Peniel.
Bradford, Harry M., Greenville.
*Cantrell, Chas. E., Greenville.

Cantrell, Will, Greenville.
Chandler, Marshall M., Greenville.
Cheatham, Jas. C., Wolfe City.
Coppedge, Jas. J., Lone Oak.
Dickens, Wm. M., Greenville.
DeJernett, Warren B., Commerce.
*Dunbar, Wm. P., Campbell.
French, Joseph H., Greenville.
Gregory, Chas. L., (Pres.), Greenville.
Goode, Emmett, Quinlan.
Hale, Benj. F., Dickens.
Hanchey, Jesse M., Caddo Mills.
Hennen, Josiah C., Lone Oak.
*Holderness, Geo. W., Commerce.
*Hopkins, Elam A., Wolfe City.
Howell, Moses S., Merit.
*Kennedy, Chas. T., Greenville.
King, Henry E., Greenville.
Lander, Jesse H., Beeville.
Lander, Roderick G., Cash.
*McBride, Albert S., Greenville.
Milner, Thos. J., Greenville.
*Moore, Athchilous B., Neyland.
Norris, G. B., Celeste.
Peak, Preston A., Greenville.
Parkhill, Geo. B., Merit.
Pearson, Preston W., Terrell.
Pearson, P. S., Celeste.
Prather, Andrew C., Greenville.
Reiff, Rankin S., Floyd.
Shuford, E. R., Wolfe City.
Smith, R. B., Greenville.
*Swindell, John W., Greenville.
Stidham, Jas. S., Floyd.
Waddle, D. Richard, Greenville.
*Ward, Jas. W., Greenville.
*Welch, Walter C., Caddo Mills.
Wheeler, Wm. J., Commerce.
*Wilbanks, Martin L., (Sec.), Greenville.
Wright, Edwin F., Royse City.

KAUFMAN COUNTY MEDICAL SOCIETY.

Alexander, Wm. F., Terrell.
*Andrews, B. C., Mabank.
Bishop, Walter A., Kaufman.
Brewer, James C., Kemp.
Couch, Joseph A., Crandall.
Cravens, J. A., Scurry.
Davis, T. P., Terrell.
Fowler, E. M., Forney.
Gladney, Samuel M., Terrell.
Hackney, Urban P., Terrell.
Hearne, R. E., Mabank.
*Holton, Robert W., Kaufman.
*Hubbard, B. J., (Sec.), Kaufman.
Hudgins, David H., Forney.
Irvine, Wm. P., Mabank.
Jackson, Eugene, Elmo.
Jarmon, Thos. M., Terrell.
Jones, Lemuel L., Terrell.
Ledbetter, David A., Crandall.
Monday, Wm. H., Terrell.
*Myers, Robert E., Kemp.
Neely, Wm. H., Terrell.
Park, James W., Kaufman.
*Phillips, Hiram M., (Pres.), Kaufman.
*Pollard, Willis J., Kaufman.
Powell, Geo. F., Terrell.
Price, John W., Rosser.
*Rowe, Robert J., Kaufman.
*Reeves, Hiram V., Crandall.
Sanders, James M., Scurry.
Shands, Percy C., Forney.
*Shaw, Guy G., Kaufman.
Sheppard, Paul R. E., Terrell.
Shoemaker, Leonard W., Lawrence.
*Sowell, Lon B., Forney.
Stevenson, Chas. W., Houston.
Still, James M., Kemp.
Thomas, Wm., Terrell.
*Watkins, Wm. A., Kemp.
Watkins, A. B., Prairieville.
*Williams, Horace B., Kaufman.
Yates, Frank P., Terrell.
Yeager, James A., Terrell.

LAMAR COUNTY MEDICAL SOCIETY.

Armstrong, J. E., Biardstown.
Bailey, P. C., Powderley.
Baird, A. C., Pattonville.
Bishop, T. V., Medill.
Black, T. R., Blossom.
Briney, H. W., Petty.
Bryan, T. B., Blossom.
*Buford, T. W., Minter.
Caton, J. H., Detroit.
Chapman, J. B., Paris.
*Creed, J. R., Roxton.
Edwards, E. P., Paris.
Fitzpatrick, W. W., (Sec.), Paris.
Fuller, J. E., Paris.
Gatlin, W. G., Howland.
Geron, T. C., Paris.
*Grant, S. H., Deport.
Hammond, J. L., Paris.
Hindman, E. C., Howland.
Hooks, J. M., Paris.
Jennings, J. L., Roxton.
*Leverett, J. L., Paris.
Lewis, R. L., Paris.
McCuistion, W. G., Davis.
McCuistion, W. W., Paris.
McCuistion, S. A., Pattonville.
McCuistion, L. P., Paris.
McMillan, J. D., (Pres.), Paris.
Meyer, Joseph, Paris.
Palmer, L. B., Petty.
Payne, G. W., Glory.
Pipkin, T. P., Annona.
Powell, J. N., Lake Creek.
Roberts, T. F., Paris.
Skidmore, J. D., Biardstown.
*Smith, H. R., Detroit.
Stell, G. S., Brownsville.
Stephens, L. B., Brookston.
Walker, J. D., Antlers, Okla.
*Walker, M. A., Paris.
Warren, S. A., Brookston.
White, J. C., Paris.

MONTAGUE COUNTY MEDICAL SOCIETY.

Anderson, W. H., Stoneburg.
Boswell, A. H., Spanish Fort.
Campbell, C. C., Newport.
*Clark, D. W., (Pres.), Montague.
*Clarke, T. H., Bowie.
*Crain, N. W., Nocona.
Davis, W. W., Nocona.
Day, W. L., Bonita.
Foster, R. A., Nocona.
Humphreys, S. T., Nocona.
Johnson, E. E., Montague.
Lawson, J. T., Bowie.
Ledbetter, F. A., Post Oak.
Lofling, T. B., Montague.
Petty, L. E., Forestburg.
*Potter, W. S., Bowie.
*Schoolfield, H. F., Sunset.
Sherrill, M. F., Montague.
*Wilson, J. D., Bowie.
Wilton, H. F., Nocona.
*Wright, E. W., Sunset.
Yeakley, G. W., Bowie.
Young, C. F., (Sec.), Bowie.

TARRANT COUNTY MEDICAL SOCIETY.

Allen, D. Emory, Fort Worth.
*Allison, Bruce, Fort Worth.
*Allison, Wilmer, Fort Worth.
*Anderson, Jas., Fort Worth.
*Axtell, E. C., Fort Worth.
*Barber, L. A., Fort Worth.
*Badt, M. R., Fort Worth.
*Bardin, J. S., Fort Worth.
*Beall, F. C., Fort Worth.
*Beall, K. H., Fort Worth.
*Bond, Geo. D., Fort Worth.
*Bonelli, V. E., Fort Worth.
*Boyd, Frank D., Fort Worth.
*Bozeman, Jas. D., Fort Worth.
*Brannon, H. O., Fort Worth.
*Brewer, C. P., Fort Worth.
*Brown, Arthur, Fort Worth.
*Cadenhead, J. H., Fort Worth.
*Carlson, O. F., Fort Worth.
*Carter, Chas., Fort Worth.
*Chase, I. C., Fort Worth.
*Chilton, W. E., Fort Worth.
*Coffey, Alden, Fort Worth.
*Colley, T. C., Dundee.
*Cook, W. G., Fort Worth.
*Cooper, J. L., Fort Worth.
*Covert, Jno. D., Fort Worth.
*Covington, G. W., Fort Worth.
*Cravens, M. H., Arlington.
*Creagan, M. V., Fort Worth.
*Cummins, J. B., Fort Worth.
*Daves, A. C., Fort Worth.
*Davis, Edwin, Fort Worth.
*Davis, W. H., Arlington.
*Dorris, T. B., Grapevine.
*Duringer, W. A., Fort Worth.
*Duringer, W. C., Fort Worth.
*Floyd, J. R., Fort Worth.
*Furman, J. M., Fort Worth.
*Gilmore, M. E., Fort Worth.
*Givens, J. M., Fort Worth.
*Godley, L. O., Garland.
*Goodman, T. L., Fort Worth.
*Gough, R. H., Fort Worth.
*Gracey, J. A., (Pres.), Fort Worth.
*Greve, Anna, Fort Worth.
*Grogan, O. R., Fort Worth.
*Haggard, F. A., Fort Worth.
*Hall, E. P., Fort Worth.
*Hammock, J. A., Kennedale.
*Harper, C. O., Fort Worth.
*Harris, C. H., Fort Worth.
*Harvey, F. L., Arlington.
*Hayes, C. F., Fort Worth.
*Hays, A. R., Fort Worth.
*Head, J. W., Fort Worth.
*Higgins, P. F., Fort Worth.
Hogsett, C. Y., Fort Worth.
*Hooper, P. L., Fort Worth.
*Irion, J. W., Fort Worth.
*Jeter, T. M., Fort Worth.

*Johnson, Clay, Fort Worth.
*Jones, O. Lee, Fort Worth.
*Joyes, Crittenden, Fort Worth.
*Kelley, J. A., Fort Worth.
*Kibbie, Kent V., Fort Worth.
*Kingsbury, H. B., Fort Worth.
*Lackey, W. C., Fort Worth.
*Lipps, Paul K., Fort Worth.
*Lipscomb, R. S., Grapevine.
*Lipscomb, W. D., Grapevine.
*Littler, W. D., Fort Worth.
*Logsdon, Harry A., Fort Worth.
*Lorimer, W. S., Handley.
*Lundy, S. A., Fort Worth.
*Mackey, W. B., Fort Worth.
*McCollum, Chas. H., Fort Worth.
*McKissick, J. L., Arlington.
*McKnight, W. B., Mansfield.
*McLean, J. H., Fort Worth.
*Meharg, J. O., Fort Worth.
*Moore, R. W., Fort Worth.
*Morton, G. V., Fort Worth.
*Mullenix, A. J., Fort Worth.
*Mullins, W. C., Fort Worth.
*Myrick, E. L., Fort Worth.
*O'Reilly, J. J., Fort Worth.
*Payne, R. S., Handley.
*Potts, Jno., Fort Worth.
Randel, Brown W., Muskogee, Okla.
*Rhodes, L. J., Tarrant.
*Richardson, J. J., (Sec.), Fort Worth.
*Rountree, W. C., Fort Worth.
*Rumph, W. D., Mansfield.
*Rushing, F. E., Fort Worth.
*Sanders, Frank G., Fort Worth.
*Sanders, J. T., Fort Worth.
*Saunders, Bacon, Fort Worth.
*Saunders, Roy, Fort Worth.
*Sellers, R. B., Fort Worth.
*Shannon, J. B., Fort Worth.
*Sheddan, Frank D., Fort Worth.
*Shoemaker, W. W., Handley.
*Shytles, H. W. G., Fort Worth.
*Simmons, Chas. B., Fort Worth.
*Smith, R. H., Fort Worth.
*Suggs, L. A., Fort Worth.
*Tadlock, M. E., Fort Worth.
*Talbot, M. L., Fort Worth.
Talbott, R. D., Fort Worth.
*Taylor, Holman, Fort Worth.
*Terrell, T. C., Fort Worth.
*Thompson, W. R., Fort Worth.
*Trigg, H. B., Fort Worth.
Trigg, Ross B., Fort Worth.
*Trimble, W. M., Fort Worth.
*Van de Venter, Bessie, Fort Worth.
*Van Zandt, I. L., Fort Worth.
*Veatch, O. E., Fort Worth.
Walker, A. C., Fort Worth.
*Walker, Webb, Fort Worth.
*Warwick, H. L., Fort Worth.
*Watters, E. A., Fort Worth.
*West, R. B., Fort Worth.
*Whitsitt, L. M., Fort Worth.
*Wilson, Sidney J., Fort Worth.
*Withers, I. A., Fort Worth.
*Woodward, S. A., Fort Worth.
*Yancey, Jno. W., Fort Worth.

VAN ZANDT COUNTY MEDICAL SOCIETY.

*Blankenship E., Wills Point.
Bowen, J. K. P., Grand Saline.
Brandon, B. B., Edgewood.
*Castleberry, G. G., Ben Wheeler.
Cox, M. L., Canton.
*Cozby, V. B., (Pres.), Grand Saline.
*Ferrell, N. E., Edgewood.
Fry, H. T., Wills Point.
Hearin, W. C., Canton.
*Sanders, D. L., (Sec.), Wills Point.
*Terry, W. H., Grand Saline.
Williams, C. R., Wills Point.

WISE COUNTY MEDICAL SOCIETY.

Blanton, W. P., Crafton.
*Braselton, B. E., Bridgeport.
*Buckner, K. L., Bridgeport.
*Carpenter, D. A., Decatur.
Cox, G. W., Alvord.
*Embry, J. A., (Pres.), Decatur.
Foster, R. T., Boonsville.
*Fullingim, P. J., Decatur.
Funk, P. C., Bridgeport.
Halcomb, V. S., Bridgeport.
*Huddleston, W. C., Newark.
*Ingram, J. J., Decatur.
Jennings, W. A., Park Springs.
*Jones, B. M., Rhome.
*Knox, C. H., Chico.
*Moore, T. A., Greenwood.
*Parris, C. J., Greenwood.
*Peek, T. B., Paradise.
*Petty, S. J., Decatur.
Randell, L. J., Springtown.
*Redford, W. E., Boyd.
*Reeves, L. H., (Sec.), Decatur.
Riley, D. C., Paradise.
*Simmons, J. E. G., Boyd.
*Sparkman, J. T., Alvord.
Stem, D. Y., Slidell.
Walker, J. H., Alvord.
Workman, C. N., Willow Point.
Wyatt, B. L., Nassau, B. I.

FIFTEENTH OR NORTHWESTERN DISTRICT.

Dr. W. H. Blythe, Mt. Pleasant, Councilor.

BOWIE COUNTY MEDICAL SOCIETY.

Abel, G. C., Texarkana.
Ball, S. C., New Boston.
*Beck, E. L., Texarkana.
Beck, J. W. E. H., DeKalb.
Center, W. B., Garland City, Ark.
Cook, J. C., Garland City, Ark.
*Collom, S. A., Texarkana.
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Dixon, B. E., Terarkana.
Evans, W. H., Maud.
Evans, H. P., Maud.
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Hawley, E. A., Texarkana.
*Helms, C. P., New Boston.
Hunt, Preston, Texarkana.
Gatlin, E. N., Red Water.
Grant, R. L., Texarkana.
Kittrell, T. F., (Pres.), Texarkana.
Klein, Nettie, Texarkana.
Kosminsky, L. J., Texarkana.
*Lanier, L. H., Texarkana.
Lightfoot, J. L., Texarkana.
Mann, R. H. T., Texarkana.
Middleton, B. C., Texarkana.
*McGee, J. R., New Boston.
Payne, P. M., Red Water.
Peterson, A. L., Texarkana.
Read, W. K., Texarkana.
*Smith, C. A., Texarkana.
Smith, J. K., Texarkana.
Speer, C. R., Malta.
*Tyson, W. S., New Boston.
*Watts, E. M., (Sec.), Texarkana.
Webster, H. R., Texarkana.
*White, J. N., Texarkana.
Wilder, J. H., Hooks.

CAMP COUNTY MEDICAL SOCIETY.

*Bates, J. K., Naples.
*Bryson, E. E., Pittsburg.
Ellington, F. H., Pittsburg.
Florence, J. B., Leesburg.
Henderson, C. F., (Pres.), Pittsburg.
*Lacy, R. Y., (Sec.), Pittsburg.

CASS COUNTY MEDICAL SOCIETY.

Dallas, E. C., Douglassville.
Davis, C. E., Linden.
Ford, T. D., Linden.
*Halbert, W. W., (Pres.), Hughes Springs.
Hartzo, J. D., Burns.
*Herndon, J. H., (Sec.), Linden.
Howe, T. G., Douglassville.
*Jenkins, H. L. D., Hughes Springs.
Lumpkin, R. D., Linden.
Starnes, A. E., Hughes Springs.
Shaddix, J. W., Marietta.
Sheppard, C. F., Burns.
Smith, O. L., Kildare.
Strawn, J. C., Queen City.
Stovall, W. T., Linden.

FRANKLIN COUNTY MEDICAL SOCIETY.

Chandler, H. E., Mt. Vernon.
Crutcher, W. C., Mt. Vernon.
Davis, P. N., Mt. Vernon.
Fleming, T. M. (Pres.), Mt. Vernon.
*Fuquay, Z. C., Mt. Vernon.
*Stephens, Geo., (Sec.), Mt. Vernon.
*Taylor, F. O., Mt. Vernon.
Williams, A. H., Hagansport.

GREGG COUNTY MEDICAL SOCIETY.

Adams, C. C., Longview.
Cole, W. A., Longview.
Feemster, M. B., Longview.
*Markham, L. N., Longview.
McPherson, D. B., Longview.
Northcutt, W. D., (Sec.), Longview.
Stansberry, L. D., Longview.
*Terry, E. E., Longview.

HARRISON COUNTY MEDICAL SOCIETY.

*Allen, G. W., Harleton.
Baldwin, B. H., Karnack.
Baldwin, J. B., (Sec.), Marshall.

Bassett, T. R., Harleton.
Carwile, H. R., Marshall.
Cocke, Rogers, Marshall.
Eads, G. L., Marshall.
Gibson, J. F., Paris.
Hall, R. C., Marshall.
*Hartt, W. G., (Pres.), Marshall.
Hargrove, C. R., Marshall.
Heartsill, O. M., Marshall.
Heartsill, C. E., Marshall.
*Hurst, V. R., Longview.
Littlejohn, F. S., Ft. Stanton, N. H.
Mahon, G. D., Sr., Blocker.
McCurdy, Carl, Marshall.
*Moore, J. A., Marshall.
Nelson, W. W., Marshall.
Rains, G. P., Marshall.
Rosborough, J. F., Marshall.
Rosborough, E. T., Marshall.
Taylor, J. H., Marshall.
Vaughan, S. F., Jonesville.
Vaughan, H. H., Waskom.
Wheat, M. H., Marshall.

MARION COUNTY MEDICAL SOCIETY.

Armistead, R. L., (Pres.), Jefferson.
Chambers, J. P., Jefferson.
Lake, I. W., Smithland.
McCasland, J. N., Lasater.
Miller, S. A., (Sec.), Jefferson.
*Moseley, J. A. R., Jefferson.
Smith, W. R., Burlington.

MORRIS COUNTY MEDICAL SOCIETY.

Anthony, E. Y., Omaha.
Farrier, R. C., (Sec.), Omaha.
Hibbetts, C. D., Naples.
*Jenkins, D. J., Daingerfield.
Moore, R. D., Omaha.
Richardson, J. S., Omaha.
Russell, Thos., Cason.
Seale, Chas. E., (Pres.), Daingerfield.
*Smith, Wm., Naples.
*Turner, L. Y., Daingerfield.

TITUS COUNTY MEDICAL SOCIETY.

*Blythe, Wm. H., (Sec.), Mt. Pleasant.
Broadstreet, Sam C., Mt. Pleasant.
Burrus, Robert E. L., Winfield.
Crabtree, Sidney R., Mt. Pleasant.
Fleming, Thos. M., Mt. Pleasant.
*Grissom, Thos. S., Mt. Pleasant.
Jackson, Wm. A., Talco.
Johnson, W. R. K., Mt. Pleasant.
Kidwell, Wm. C., Winfield.
Leftwich, David M., Mt. Pleasant.
Miller, Jas. S., Mt. Pleasant.
Roundtree, J. L., Mt. Pleasant.
Smith, Albert A., (Pres.), Talco.
Tabb, Luther M., Mt. Pleasant.
Taylor, John S., Cookville.

UPSHUR COUNTY MEDICAL SOCIETY.

Craddock, S. W., Pritchett.
*Childress, H. J., Gilmer.
*Daniels, J. G., Gilmer.
Dial, H. C., Big Sandy.
*Duke, H. M., Lafayette.
Eastham, J. G., Pritchett.
*Ragland, T. S., (Sec.), Gilmer.
*Richards, M. B., Ashland.
Rogers, Chas. Rosewood.
Taylor, G. A., (Pres.), Bettie.
Wilson, H. C., Gilmer.
Winn, J. C., Gilmer.
Wood, B. W., Gilmer.

WOOD COUNTY MEDICAL SOCIETY.

Baber, W. L., Winnsboro.
*Beavers, W. L., (Pres.), Hawkins.
Black, W. T., Quitman.
Conger, J. D., Quitman.
Connell, J. T., Mineola.
Eakes, P. M., Winnsboro.
Farrington, R. A., Alba.
*Faulk, Lem, Alba.
Goldsmith, J. B., Quitman.
*Harris, R. A., Winnsboro.
*Lipscomb, C. D., Quitman.
Meadows, W. M., Como.
McKnight, F. V., Alba.
Puckett, J. M., Mineola.
*Robbins, V. E., (Sec.), Quitman.
Shelton, A. M., Golden.
White, J. W., Yantis.

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

THE CANCER PROPAGANDA.

Physicians have for years recognized the pressing importance of the cancer problem and sporadic efforts have from time to time been made to arouse the interest of the laity. Success has until recently been rather indifferent, for the reason that there has been little cooperation and less system in the work. The American Medical Association, the several State Associations, the American Surgical Association, the American Dermatological Association, the Association of Pathologists and Bacteriologists, the American Gynecological Society and many other medical and surgical and semi-professional organizations, had maintained committees more or less constantly, all intended principally for the purpose of arousing public interest in a question which was assuming serious proportions. Representatives of many of those agencies met with the committee representing the American Gynecological Society two years ago and organized what is now known as the American Society for the Control of Cancer. The object of this society, as announced, is, "to disseminate knowledge concerning the symptoms, diagnosis, treatment, and prevention of cancer; to investigate the conditions under which cancer is found, and to compile statistics in regard thereto." This national organization seemed to meet with instant approval from all quarters, and it today stands as the clearing house for and connecting link between all organizations and agencies of whatsoever character, interested in this great problem. The society disclaims any intention of superseding or displacing any of these organizations, and has it for a fixed policy that no good work in any portion of the country be paralleled. It is quite clear that there has not been and it is likely that there will not be, any conflict as a result of the efforts of this larger and more comprehensive body. Indeed, the National Society has found it quite convenient to work through local agencies wherever they may be found. For instance, the Council on Public Health and Instruction of the American Medical Association has published a number of bulletins prepared by the National Society, and has supplied them through its own press bureau to the lay and professional publications of America. Dr. Frederick R. Green, Secretary of the Council, is a director of the "Control" society. It will be noted that the matter of research, except for the compilation of special statistics, is left to those workers who are engaged exclusively in the field of pure scientific research; and these agencies are, we understand, united in their own national organization, known as the American Association for Cancer Research. With the latter, the laity can have little direct concern, and it is a proper provision that an organization made up largely of laymen, not concern itself with such problems. Our own Committee on the Study of Cancer, was designed primarily to place us in touch with the latest pronouncements on cancer, from every aspect, and it has, quite properly, relied very largely for its information on the American Society for the Control of Cancer.

Recently the Committee on Cancer of the Medical Society of the State of Pennsylvania, under the leadership of Dr. J. M. Wainwright, conceived the idea of mobilizing the forces at present engaged in an effort to control cancer, in order that we may convince ourselves and the public of the size and importance of the

movement. Following the suggestion of this committee, some seventy-five of the leading medical journals of the country agreed to devote their July numbers to the subject of cancer, and twenty-four of the State Medical Associations have agreed to urge special cancer meetings in their respective county societies. It is needless to say that Texas has seen fit to join this movement, and we are proud to present herewith a series of articles on the subject of cancer, of real worth and much interest. Three of these articles have a direct bearing on the control side of the problem; the others are principally medical, directed mainly to the subject of treatment. They are all good articles and every line is worth careful study.

Carrying out now the balance of the agreement, we earnestly urge that county societies devote their next meeting to the study of cancer, and that wherever practicable public meetings be held for the same purpose, and in order that the public may be thoroughly impressed. There is enough material in the present number of the JOURNAL to supply speakers for such an occasion with all the data they will need.

It is the present intention of the American Society for the Control of Cancer, to secure statistical data that will be helpful to research workers and others, in their efforts to thoroughly comprehend the subject. Already the United States Census Bureau has agreed to prepare a special report on the cancer mortality of the United States registration area, for 1914, divided into thirty titles of organs and parts of the body affected, instead of six general groups as heretofore. An effort will also be made to make a distinction between returns based on certain and those based on doubtful diagnoses. The profession can help in this particular very materially, by stating in their death certificates whether the diagnosis was based on clinical findings alone, or was established by surgical intervention, microscopical examination or autopsy. We trust this feature of the work will be borne in mind by our readers, and that their report will be made accordingly. In addition, special statistical studies of the geographical, racial and occupational distribution of cancer will be made, and the records of surgical treatment of the disease in the leading hospitals of the country will be collected and compiled upon a uniform plan. The value of such data will be beyond calculation. We feel sure that our surgeons will not hesitate to assist in every way possible in the collection of this material.

WHAT WE KNOW ABOUT CANCER.

While we may not yet claim to be thoroughly informed on the subject, the immense amount of research work and carefully recorded clinical observations, have placed us in a position to be very positive in certain very helpful particulars. We do not yet know the cause of cancer, but certain facts concerning its appearance and method of development are well known, and concerning those facts we can and should speak positively. And while we may not hope to eradicate the disease as a result of our present knowledge thereof, we could take a long step forward if the medical profession would first thoroughly inform itself and then speak out, and the public would lend an attentive ear.

We know that the disease is local at first, and that total excision will at such a time, prevent its future development.

We know that this period of local development is extremely uncertain as to time, and that it is rarely, if ever, accompanied by pain.

We know that there is a condition which very, very frequently leads to cancer, and we have by common consent designated said condition as "precancerous."

We know that precancerous conditions are developed into what we now know as cancer, through the agency of some more or less chronic irritation.

Unfortunately, we do not know exactly what forms of irritation will do this, or how, but we do know that if the precancerous condition is removed, and the chronic irritation is prevented, cancer is not likely to occur.

We know that some 75,000 people die each year from cancer, and that at the age of forty the disease causes the death of one in eight of our women and one in fourteen of our men.

We know that it is for this reason a greater menace in adult life than tuberculosis or pneumonia.

We know, also, that the medicinal treatment of cancer is not only folly, but criminal.

We know that the *x*-ray and radium will frequently cure the disease, but that in the

same stage the knife will likewise and invariably do so.

We know that the knife, *x*-ray and radium, will all ameloriate the disease in its incurable stage, and that very rarely a presumably incurable case will by some of these means be cured.

We might enumerate still other facts connected with this disease concerning which we are fairly well informed, but this is enough. Should we act intelligently in the light of even this much knowledge, the prevalence of the disease would be materially diminished.

As to the etiology of cancer, nothing is certain. There is undoubtedly a "precancerous condition," susceptible of development into a malignant growth of some type, in answer to injury or chronic irritation.. The visible precancerous conditions exist in the form of warts, naevi, scars, etc. They are frequently not discernable at all. Whether the precancerous condition is the result of misplaced embryonic tissue, in accordance with the prenatal or postnatal rest hypothesis, or whether, as MacCarty suggests in his article in this number of the JOURNAL, the formation of the neoplasm is an attempted protective hyperplasia of germinative cells, we may not yet determine. Whether the irritation necessary to produce the new growth is purely mechanical, the result of bacterial invasion, or both, may likewise not yet be known. The discovery of filterable viruses, some of them clearly shown to be specific, would seem to strengthen the so-called parasitic theory materially. It is probable that these viruses serve variously to cause different types of neoplasms, and they may constitute only a portion of the irritation required for the production of cancer. It is probable that certain constitutional factors are required, as developed by the research work of Dr. Maud Slye, in her effort to breed the disease into successive generations of mice. It is hardly possible that there is a single cancer parasite, granted that parasites are at all responsible for the development of the disease. The compliment deviation, and the Abderhalden reaction, show that the blood contains anti-bodies and anti-ferments, which would seem to strongly support the parasitic theory.

It is not thought that cancer itself is hereditary. The studies of Dr. Slye would tend to the belief that the *tendency* to develop cancer is transmitted, and it would certainly seem to be a fact that this tendency can be bred into and out of a strain of mice at will, in exact accord with the laws of heredity, already well known. She has bred cancer through ten generations, and at the present time has a stock of ten thousand mice under observation, among which spontaneous cancer is constantly arising. Whether or not the facts determined in these experiments may be assumed to apply to humans, it is quite clear that one can inherit certain physical characteristics and even personal disposition, both of which may be influenced by environment. The conclusion may be fairly drawn that families in which cancer has appeared extensively should avoid any irritation likely to light up a precancerous condition, and should exercise some ordinary precaution in the matter of mating.

Whether cancer is increasing is likewise a subject for debate. Undoubtedly the figures are on the increase, but it is altogether probable that improved methods of gathering statistics and the increasing tendency of the profession and the laity as well, to tell the truth about the matter, has simply brought the disease more prominently to our attention. Incidentally, as our knowledge of the disease increases, our ability to make early diagnosis likewise increases, and many cases are diagnosed and cured before the patient has had an opportunity to die from some other cause. We believe the tendency of modern authentic literature is to the end that there need be no great alarm or panic in the matter of the increase of cancer. The fact remains, nevertheless, that no possible precancerous condition should be allowed to remain unchallenged in the human body.

Finally, we would lay it upon the profession as a sacred trust, that no opportunity be lost to acquaint the public with the dangers arising from the practices of the advertising cancer quack, particularly in the matter of treatment by pastes and local applications. Too much cannot be said in this particular, regardless of the unfortunate disposition of the people to impugn our motives in discussing the quack. The advertising campaign of the quack can and should by all means be met, and with the same strategy.

THE SAN FRANCISCO MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

Despite predictions to the contrary, the San Francisco meeting was quite a success. It seems that the counter attraction of the big show did not materially interfere with the orderly conduct of the business of the Association, and the great distances from the centers of medical population did not materially interfere with the attendance. The attendance last year at Atlantic City, in the midst of the greatest mass of medical men in the country, was 3,958; at San Francisco, far from the great bulk of the medical profession, it was 2,315. We note that only a few state associations were not represented in the House of Delegates, and the missing members were principally from the larger cities in the East and middle West. It would be interesting to study the registration with a view to determining just how much new blood there was in attendance. We have before insisted that any expedient that would attract to the meeting of the American Medical Association a number of Fellows who had not before attended, is worth while. The many attractions of these annual meetings may be depended upon to hold them to future attendance. The trouble with most organizations of this character is that they fall into the hands of a few, and thereby get into a routine which may or may not represent the great bulk of its members. The new blood added from time to time in this or any other manner, is wholesome.

Texas had full representation in the House of Delegates, as follows: Drs. C. E. Cantrell, Greenville; Marvin L. Graves, Galveston; A. B. Small and E. H. Cary, Dallas; W. B. Russ, San Antonio. The registration from Texas was as follows:

Drs. J. M. Frazier, Belton; M. A. Weems, Columbia; E. H. Cary, A. B. Small and J. S. Turner, Dallas; L. B. Auerbach, C. M. Hendricks, M. P. Schuster, H. H. Stark, H. H. Stevenson, G. N. Thomas, J. M. Vance, El Paso; J. B. Miller, Falfurrias; J. S. Bardin and Bacon Saunders, Fort Worth; M. L. Graves, Galveston; C. E. Cantrell, Greenville; O. L. Norsworthy, Houston; J. W. Thomason, Huntsville; J. E. Dildy, Lampasas; J. Guenther, Moulton; Jim Camp, Pecos; G. N. Ricks, Pleasanton; G. H. Johnson, Quanah; H. T. Wichman, Riviera; H. C. Cunningham, A. C. McDaniel, G. H. Moody, W. B. Russ and Clarence Warfield, San Antonio; O. C. Ahlers, Sherman; J. W. Vermillion, Sinton; J. I. Collier, Taylor; J. E. Robinson, Temple; J. H. Lanier, Texarkana; C. W. Simpson, Waxahachie; J. W. Torbett, Marlin.

In the election to the presidency of Dr. Rupert E. Blue, Washington, D. C., Surgeon General, United States Public Health Service, the Association did itself credit and honored one of its most worthy and highly respected members. This particular meeting of the Association was more than anything else, commemorative of the leading part taken by the sanitarians in the profession in the construction of the Panama Canal and the clean-up of many tropical and semi-tropical countries and ports, and it is eminently fitting that one of the chief sanitarians of them all should have been elected to leadership. Dr. Gorgas, to whom the success of the Panama Canal undertaking may properly be credited, has already been honored in this respect, and has served his time as president. It will be recalled that it is to Dr. Blue that the Pacific Coast, and entire country, as for that, owes its present freedom from the prevalence of bubonic plague. It is to him, also, and his competent assistants in the United States Public Health Service, that New Orleans and the South are likewise favored. It is difficult for anyone not connected with the prevention of pestilence, to understand the many difficulties in the way, and the great amount of diplomacy and initiative necessary to succeed. It is perhaps to the diplomacy and inititative of Dr. Blue, more than to his scientific attainments, however extensive they may be, that this country owes its freedom from plague and pestilence, and we believe that the intelligent laymen and the medical profession as a whole, will warmly approve of his election to the presidency of perhaps the greatest medical body in the world. The vice-presidents are as follows: Drs. Albert Vander Veer, Albany, N. Y.; Geo. B. Evans, Dayton, Ohio; Donal Campbell, Butte, Montana, and H. C. Moffitt, San Francisco. Dr. A. R. Craig, was re-elected Secretary, and Dr. W. A. Pusey, Treasurer. Drs. Harris, Councilman and McDavitt were re-elected to the Board of Trustees. Detroit Michigan, was selected as the next place of meeting, and it has been suggested that perhaps a Ford automobile will be presented to each member as a badge, which will be entirely appropriate, as it can afterwards be used as a watch charm.

Commemoration day, which, it will be recalled, was the conclusion of our effort to commemorate the part played by the medical profession and those of our number who have specialized in sanitation in the construction of the Panama Canal, was fittingly celebrated as planned. Major General Gorgas was unable to attend the meeting, which was a distinct disappointment to many. President Rodman delivered a tribute to Dr. Gorgas, which was received with acclaim. Drs. Victor C. Vaughan, Wm. J. Mayo, and William Allen Pusey, delivered suitable addresses, covering the general subjects of infection and immunity, cancer and syphilis.

From the report of the Secretary, we learn that the membership of the Association, comprising the membership of the several State Associations, is 76,020, which is a substantial increase over that of last year. The Fellowship of the Association on May 1st of this year, numbered 42,366, which is likewise a substantial increase for the year. It is seriously to be regretted that the Fellowship and membership are not practically indentical. There are supposed to be 6,024 physicians in Texas, of which number 3,362 are members of the State Association, and 1,300 Fellows of the American Medical Association. Not counting those physicians in Texas who are not eligible to membership, we still find that there are quite a few who should be both members of the State Association and Fellows of the American Medical Association. So far as our observations may be depended upon, and we receive in our office practically every medical publication in this country, it is hardly possible for a physician to keep abreast of the times except he receive *The Journal of the American Medical Association.* We are in earnest about this statement, and make it solely in the interest of those of our number who are not subscribers to this indispensable publication. Of course, it will be understood that all Fellows are by virtue of their fellowship, entitled to *The Journal.*

The Trustees inform us that the finances of the Association are in slightly better condition this year, the profits from the year's work amounting, in round numbers, to $4,000, as against $2,000 last year, the reserve fund, decided upon last year, amounting to $118,832.-50. It will be recalled that a reserve fund of $300,000 was deemed essential. Of course, the profits of the year's work have gone to extending the public health operations of the Association, and for that reason cannot be considered a loss.

Commenting on the several damage suits brought against the Association, and particularly that by the Wine of Cardui people, the Trustees make the following comment, which is well worth reproducing here:

"Since these suits were instituted, the enormous power wielded by the money obtained from the sale of this fraudulent nostrum has been evidenced in many ways. Though it is sold largely through the South and Southwest to sickly women of the poorer and more ignorant class, those exploiting it have amassed fortunes, and, apparently, are prepared to spend a fortune in defending the nefarious business. The owners of the Chattanooga Medicine Company loom large in the commercial life of Chattanooga. So great is the influence of the wealth of this concern that not only have business men of Chattanooga and vicinity apparently been afraid to express themselves regarding the discreditable business in their midst, but even some of the physicians of the locality seem to have come under the same blighting influence. In spite of the expense involved, the Association is prepared to demonstrate in court that Wine of Cardui is one of the most glaring frauds perpetrated on the sick women of the country. Moreover, it will show in no uncertain way that the educational work of the Association in the interest of public health cannot be suppressed through the intimidation of patent medicine fakers whose fortunes have their foundations on the ignorance and credulity of ailing women."

In connection with the report of the Board of Trustees, a special report upon the work of the Council on Pharmacy and Chemistry, is of particular interest. The Trustees unhesitatingly charge that the medical profession is not yielding the support to the Council that it is entitled to yield, and unhesitatingly place the blame where it belongs, that is, on the low grade medical schools and their product, the half-educated physician, and the subsidized medical press, the bulk of the so-called independent publications. Commenting on this phase of the situation, the Trustees have the following to say:

"Today we have this anomalous condition: The medical profession, through its authorized agency (the Council), has shown certain medicinal preparations to be fraudulent; the same medical profession, however, is supporting medical journals that are

promoting these very preparations and in some instances accepting advertisement which the lay press rejects as fraudulent. The condition is not only anomalous—it is ridiculous. The Council on Pharmacy and Chemistry has presented undisputable evidence, has submitted demonstrable facts, to prove that certain products are frauds on the medical profession and on the public; at the same time medical journals, through their advertising pages, are sharing in the profits that come from the continued exploitation of these very frauds. Let it be emphasized that the nostrum evil, whether we apply the term "nostrum" to "patent medicine" or to so-called "ethical" proprietaries, depends for its life on advertising; cut off its advertising and it will die. Medical journals that lend their pages to the exploitation of medicinal frauds are responsible for one of the greatest curses that afflict the medical profession, and through it the public.

"The remedy is in the hands of the physician. The physicians who subscribe for or contribute to such a medical journal are, to a certain degree, responsible for what appears in that journal, for without their support it could not exist. It must be remembered that some of our leading journals are owned and published by laymen. Naturally, the interest of these publishers in the medical profession and in scientific medicine, is commercial and not professional. Naturally, too, their point of view is different from that of physicians. Having no knowledge of medicine, these laymen cannot judge of the character of medicinal preparations they advertise. If their readers, who are supposed to have a knowledge of therapeutics, do not object to the advertising of certain products, it is hardly to be expected that the publishers will do so."

The report of the Judicial Council, in addition to other subjects, embraces a most comprehensive and valauble discussion of the general subject of workingmen's compensation laws, about which we will have more to say at a future time. Those who are at all interested in this question will do well to turn to this report immediately and study this most excellent exposition of an important subject.

The Council on Public Health and Instruction, as usual, has been very active, and has accomplished more than we could undertake to comment upon. Perhaps the most important of its undertakings has been the effort to correlate the activities of the several national health organizations, and it seems now certain that a joint meeting of at least the principal of these will be held in 1916. It is to be hoped that in the contemplated meeting the field will be properly subdivided, that no work of any one of the several bodies will be paralleled and duplicate expense and effort thereby entailed. Against the consummation of such endeavor, the selfish interest of certain promoters will have to be overcome; but it is confidently expected that the common sense of the greater number will prevail. Unfortunately, the Couneil has had to work under reduced appropriations, and the Lecture Bureau has had to bear the brunt of the reduction. During the year, however, the Medicolegal Bureau has completed and printed a book on "The Digest of Supreme Court Decisions on Medical Practice Acts," and has practically completed the collection of public health laws of States and municipalities, all of which will be of great service in the future in prosecuting work along these lines. The report of the sub-committee on Expert Testimony is of particular value at this time. A model law has been framed, in conjunction with Committees from the American Bar Association and the American Institute of Criminal Law and Criminology, covering the matter of expert testimony in criminal cases in which the plea of insanity is raised. It was thought best to deal with the general subject of expert testimony according to its several phases, and this is the start. It will be recalled that the House of Delegates last year requested that all state associations and other organizations await the action of this special committee before attempting to secure legislation covering this subject in general or in particular. It will be seen why this is desirable. The bill referred to creates two classes of experts, those summoned by the court, and those which may be called by either the prosecution or the defense. It is left to the discretion of the court whether it shall have representation in this manner. The bill also provides that the experts representing the court shall have an opportunity to examine the accused in all criminal cases, before any testimony from the defendant's experts shall be admitted in court. The judge is given the authority to commit any accused brought to trial under this law, to a state hospital for the insane, for the observation of medical experts. But the distinct advance in legislation of this character provided for by this law, is the provision that the experts who are to testify may write out their findings, and give the reasons therefor. Under such a system, the physician would be in

a position to tell the whole truth and substantiate his statements, without the interference of the lawyers for the other side of the case, who are seeking to make him tell only half truths or in some manner create a totally different impression on the jury from that which he intends. The sections of the bill are entirely independent, and should any of them prove unconstitutional the others would hold.

The Council on Medical Education included in its report a new classification of medical colleges in which the "A plus" classification has been abolished. The Council reports that there are now an even hundred medical colleges in the country, of all schools. According to this, the fifth grouping, those in Class A are recommended as entirely worthy of recognition by State licensing boards; Class B constitutes those concerning which state boards should exercise extreme care, and formulate their own conclusions, and Class C, those which are not entitled to recognition, except they are totally reorganized and greatly improved. There are 19 colleges in Class B and 14 in Class C. The University of Texas is rated as A, and Baylor and the Texas Christian University as B schools. The total registration in all the states for 1914, is given as 5,797, a reduction of 2,068 below that of 1906, when the work of the Council began in earnest. Perhaps the best work during the past year that has been done by the Council on Medical Education, is the effort made to classify and pass upon the so-called post-graduate schools. An effort is made to classify the instruction given by these post-graduate schools, and to estimate the requirement of the medical profession in this respect. It is the opinion of the Council that some effort should be made to require of these schools an arrangement to cover the needs of the graduate physicians of the country, and see to it that some system is followed in their teachings. There are five classes of graduates who need to be provided for, namely, (1) those who expect to undertake research work; (2) those who expect to enter some specialty; (3) those who desire to take advanced instruction; (4) those who desire to take advanced instruction in regular medical schools, and (5) those who desire to make up deficiencies in previous medical training. It is recognized that considerable difficulty will be experienced in classifying these schools, but it is quite clear that the effort is in the right direction. Some of these schools are said to be doing good work, while others are hardly more than fraudulent concerns. It is very evident that the management of a post-graduate, or better, a graduate school, involves something more than the presence of a sufficient number of qualified teachers and a sufficient quantity, in the aggregate, of clinical material. The teachers must be in a position to give their time to the work of teaching when it is required, and the proper clinical cases should be on hand when that is required. For this reason, it is extremely difficult to maintain a school of this character in a city of less than several hundred thousand inhabitants, and outside of the permanently established and properly organized medical colleges.

The committee appointed last year to revise the general arrangement of scientific sections, made a comprehensive report, in which it is suggested that the sections be divided as follows: (A) The Medical Sciences, comprising anatomy, physiology, pathology, bacteriology and pharmacology; (B) Medicine, comprising the present section on Practice of Medicine, Diseases of Children, Nervous and Mental Diseases, Preventive Medicine and Public Health and Hospitals; (C) Surgery, comprising the present Section on Surgery, General and Abdominal, Obstetrics, Gynecology and Abdominal Surgery, Genito-Urinary Diseases and Orthopedic Surgery; (C) the Specialties, comprising the present Sections on Ophthalmology, Laryngology, Otology and Rhinology, Dermatology, and a New Section on Stomatology, Gastro-Enterology and Proctology. The committee recommended that a standing committee or council on section work be appointed, the duty of which would be to secure co-operation between these several sections, stimulate them in their work, settle all questions of policy or differences of opinion between them, and recommend any desired changes in arrangements or allotment of time. This Council is to consist of five members, one from each of the four groups above mentioned, and the fifth to be the Secretary of the Association. The Council recommended was provided for, and the division into sections deferred until the said Council could make further recommendations.

The Board of Trustees was authorized to

petition Congress to amend the Harrison Narcotic law so as to bring under its provisions, proprietary and other ready-made preparations containing narcotics, such as are now exempt in Section 6 of said law. As pointed out, the Section referred to represents the influence over Congress of the proprietary and patent medicine industry of the country, and was accepted in the first instance with considerable regret and shame on the part of those who were earnestly and honestly trying to suppress the narcotic habit without regard to personal benefit to be derived or relinquished by anyone.

The House of Delegates also adopted a resolution earnestly advising all members of the medical profession to withhold their support from those medical journals which advertise proprietary remedies that have not been investigated by and accepted by the Council on Pharmacy and Chemistry.

Amendments to the by-laws were adopted providing that a physician living on or near a state line, may join the Association most convenient to him, upon the express permission of the Council of the State Association in the jurisdiction of which he actually resides.

Resolutions were adopted calling upon the President of the United States and Congress "to create a commission, either through a department or bureau already established, or by special appointment, to investigate patent and proprietary remedies sold in interstate traffic and offered to the people for the relief and cure of bodily and mental infirmities, to the end that the people shall have a plain, common, truthful and unprejudiced report of the actual value of such articles, and to expose the fraudulent and deceitful practices that such investigation might disclose; so that the people may no longer be made the innocent victims of avarice and fraud when seeking the means to regain their health."

President Rodman, in his annual address, had a great deal to say about the proposed national board of medical examiners. This portion of his address seems to have been overlooked by the majority of the Reference Committee on Reports of Officers. A minority of the committee brought the matter to the attention of the House of Delegates, and the entire subject was referred to the Council on Medical Education for further consideration.

The proceedings of the House of Delegates are published in full in *The Journal of the American Medical Association,* July 3rd, 1915.

THE HARRISON NARCOTIC LAW AGAIN A SUBJECT OF INTEREST.

Every physician formally registered under the Harrison Narcotic Law should have received from the State Revenue office another blank to be filled out, sworn to, and forwarded to the said revenue officer, together with a dollar, not later than July 1st. The fee in the first instance, as before stated, was only for a fraction of the year, and it now becomes necessary to renew licenses for another and this time a full year. The license fee is one dollar per year. There has been some complaint that the new blanks require the seal of a notary, and concerning the necessity for this we are somewhat at a loss. Doubtless there is a good reason for this requirement, and as the expense and trouble is a small matter, the profession will not be fretful. This law is a far reaching law, and in the interest of those whom it seeks to protect, we can afford to be patient and await developments.

During the month of June, two very important decisions were rendered under this law. It has been ruled that the prescription of a physician does not fall under the exemption clause, no matter how small the quantity of drug it contains. In other words, a proprietary or patent medicine containing less than the allowed portion of opium may be sold on the open market without any restriction, while the prescription of the physician, even though it contains less of the opiate or interdicted drugs, than the ready-made remedy, must suffer the restriction prescribed by the law. This is an unjust provision, but it is a just ruling. The exemption clause, Section 6, as before stated, represents the political power of the patent medicine interest, and must be repealed. The House of Delegates of the American Medical Association has made a demand to this effect, and it is within the range of possibility, certainly if the medical profession will arouse itself, that the near future will see the elimination of all exemptions whatsoever. In the meantime, the profession will yield gracefully to the ruling.

The other decision requires that licenses under this act be issued only to persons engaged in the legitimate practice of the trade or profession provided for in the act, and that these drugs may be dispensed only in the course of professional practice, as it relates to physicians, dentists and veterinarians, and when the employment to prescribe is specifically for the patient receiving the drug, and on whom the dispenser is in personal attendance. The intention of this decision is to shut off a growing mail order business, with which the medical profession, as such, has little interest. No reputable physician will engage in a mail order practice.

ORIGINAL ARTICLES.

REPORT OF THE COMMITTEE ON THE STUDY OF CANCER.*

H. R. DUDGEON, WACO, CHAIRMAN; R. W. BAIRD, DALLAS, AND GEO. D. BOND, FORT WORTH, COMMITTEE.

Cancer ranks high among the great causes of death. In 1913 it caused the death in the United States of more than half as many people as tuberculosis. After the thirty-fifth year of age it causes more death than either tuberculosis or typhoid fever.

Cancer is increasing more rapidly than the population. During the time in which the population of England doubled the frequency of cancer increased six fold. In Massachusetts, in 1900, the death rate from cancer was 74.6 per 100,000 of population; in 1911 it had risen to 94.4. In every state in which reliable statistics are available, cancer shows a decided increase; and the same is true for nearly every civilized country. Some claim that this increase is only apparent and that it is due to better diagnoses; that may account for some of the increase but by no means all of it.

Great activity in cancer research has sprung up in the past ten or fifteen years, and as a result of investigation in that field our conception of cancer is being modified. Rouse has shown that chicken sarcoma is due to a filterable virus, and that rat sarcoma, which behaves in many ways like chicken sarcoma, is not caused by a filterable virus; thus it appears that two apparently similar types of sarcoma have a different etiology. It is probable that the carcinomata comprise a number of neoplasms that differ etiologically.

The cause or causes of cancer still remain unknown. The germ theory still lacks identification of the causative germ. Williams says extrinsic factors are not needed to account for the origin and growth of a tumor, and Prof. Ewing[1], says that the theory of cell autonomy offers the best explanation of the origin of tumors.

Cancer is a disease of the cell; that was pointed out by Moore of London in 1867. Prior to that time it was thought to be a disease of the blood and lymph, hence general from the start, but we now know absolutely that it always begins as a local manifestation, and remains local until metastasis takes place. The time of metastasis varies. In the most malignant tumors it may take place in a few weeks, while in the least malignant it may not occur for several years; but in the end all varieties of cancer metastasize and become general. As long as cancer remains local it is distinctly curable, but it does not remain local indefinitely, and there is no way of foretelling the time at which a malignant cell will become detached from the local growth and be carried to a neighboring lymph gland. But we do know that this occurrence in some localities means death, and it very materially lessens the chance of cure in any locality. While metastasis usually takes place by way of the lymphatics, the blood stream or even tissue planes, may be the means of conveyance.

MacCarty and Blackford[2], pointed out that one or two small deposits of cancer cells may not change the size, color, shape or consistency of a lymph gland, and that, therefore, the microscope is absolutely necessary to determine the presence of cancer deposits in some of the glands; they also pointed out that an enlarged gland was very frequently inflammatory, and not always by any means malignant. These are important facts because of the frequent and slovenly practice of determining infection of the lymph modes by palpation through the skin, fat and subcutaneous tissue. One cancer cell deposited in a gland is sufficient to reproduce the disease, and it takes considerable magnifying power to enable the eyes to see one cell; it cannot be felt. It must therefore be taken for granted that the glands that drain an area, the site of a cancer, are infected and should be removed in all cases where it is possible to do so.

Cancer is common to all ages, but it shows very marked preference for the ages beyond thirty-five. Of 26,701 deaths from cancer reported by Williams, 109 occurred before the age of five; 95 per cent occurred after the age of thirty-five. It must never be forgotten that the young can have cancer.

Cancer is more frequent in women than in men, due to the great prevalence of breast and uterine cancer. For the decade, 1901-1910, in the registration area of the United States, according to Hoffman, there were 282,695 deaths from cancer; of these, 173,369 were in the female, 109,299 in the male. Williams presents 7,297 cases of cancer of which 4,628 were in the female.

Cancer shows decided preference for certain organs; thus, cancer of the stomach comprises 33 per cent of all cancers—Mayo and Rodman put it at 35 per cent; Hoffman places cancer of the stomach and liver for both sexes at 41.5 per cent, it is much more frequent in men than in women; in males, 12 per cent occur in the rectum, peritoneum and intestines, 7.3 per cent in the buccal cavity, 6.3 per cent in the skin and 23.8 per cent in all other organs; in women cancer occurred in the breast in 14.4 per

1. Ewing, James: *Archives Int. Med.*, vol. 1, p. 175.

*Read before the Joint Session of Scientific Sections, State Medical Association of Texas, Fort Worth, May 5, 1915.

2. MacCarty, W. C., Blackford, J. M.: *Annals of Surgery*, 1912, p. 811.

cent of the cases, in generative organs in 23.1 per cent, rectum, intestines and peritoneum, 10.9 per cent, skin 2.1 per cent, buccal cavity 1 per cent and in other organs 15.9 per cent; in 4,628 cases of cancer in the female, Williams found the uterus involved in 40.3 per cent of the cases, and the breast in 34 per cent.

Cancer is more largely a disease of the alimentary tract than is commonly supposed; Williams puts it at 54 per cent, which includes all cancers of the alimentary tract and not of the stomach alone.

Heredity is quite generally supposed to play some part in the etiology of cancer. Williams says that the decendants of a family in which a new morbid variation has appeared, are more likely to vary again in a similar way than are persons whose relatives have never manifested such variation. This principle is applicable to cancer. Warthin[3] made a study of heredity in 1,600 cases of cancer. He could not get a connected history in many of his cases, but in spite of that he found a family history of cancer in 15 per cent.

Cancer is rare in uncivilized races. Civilized people become more prosperous and more highly nourished. Among civilized people cancer is more common in the well to do and well fed than among the poor and ill fed.

Cancer has been shown in the past few years to develop very often at the site of some lesion due to chronic irritation, and this lesion is called a precancer lesion. Bloodgood made a study of 820 eases of cancer of the skin and visible mucous membranes, and in every case in which a careful history was taken there was a defect that preceded the development of the cancer that might be looked upon as a precancer lesion. W. J. Mayo says that chronic irritation, whether due to mechanical, chemical or infectious agencies, is the most important of all precancer conditions. Von Bergman believes that a single contusion of muscle or gland may be the predisposing cause of any kind of cancer. Coley[4] in discussing this point gave the following statistics: In 800 cases of sarcoma a definite history of trauma was noted in 179 cases; in 117 cases the tumor developed in the first month after the injury; in 250 cases of carcinoma there was a history of attendant trauma in 82 cases. Of these cases 120 were of the breast and 52 of them followed a single antecedent trauma. MacCarty and Broders[5] studied 684 resected portions of the stomach, removed at the Mayo clinic. Of these 472, or more than two-thirds, presented the characteristics of a simple ulcer plus the presence of cancer. Cancer so often develops at the site of chronic irritation, that surgeons are now recognizing the importance of curing such areas as a prophylaxis against it. Compared to chronic irritation cancer is rare. It is probable that most people possess either a partial or complete immunity to cancer, while a minority are without such protection; and it is this minority in which irritation acts as a predisposing cause.

Cancer is a most insidious disease. It approaches its host under the guise of innocence. It moves with such silent tread that its advance line of invasion has often passed beyond the reach of therapeutic aid before the victim has been aroused to the terrible nature of his malady. It causes no pain, no loss of strength, no pallor, no emaciation, no ulcer and no foul discharge in its early stages; these all come late and are signs that the disease is no longer local and that the chances of cure are all but gone.

Cancer of the external surface should be easy to diagnose in the early stage, provided the patient presents himself for examination; but cancer of the internal organs, with the exception of the easily examined mucous membranes, is often most difficult to diagnose while it is yet curable, because the patient so often has no symptoms that he considers of sufficient importance to consult his doctor about until the disease has become widespread. Cancer has no early pathognomonic symptom, and it is the early symptom alone that warns in time; pathognomonic symptoms, however, will come, but not until after most of the chances of cure have gone.

Earnest efforts are being made to find a reliable, early method of diagnosis in cancer. A number of physical, chemical and serological tests have been brought forward, but most of them have been disappointing, while a few give sufficient promise to deserve further trial.

Abderhalden's test for cancer depends on the power of the serum of the cancer patient to digest cancer protein. It is claimed for this test that it is stronger and more positive in the early stages of the disease, before the patient's resistance to cancer has largely broken down. Ball[6] tried this test in 28 cases; it was positive in 20, all of whom subsequently proved to have cancer. Bullock[7] says that Abderhalden's method of distinguishing normal from cancer serum is not reliable. More time and experimentation may prove it to be a valuable diagnostic aid, or it may show it to be wholly unreliable. The Meiastagmin test of Ascoli is positive in a very high percentage of cancer cases, but it reacts to so many other conditions beside cancer that it is not reliable. The Salmon-Saxl urin sulphur test has been found to be

3. Warthin, A. C.: *Arch. Int. Med.*, November 15, 1913.
4. Coley, W. B.: *Annals of Surgery*, April, 1911.
5. MacCarty, W. C. and Broders, A.C.: *Arch. Int. Med.*, February 15, 1914.
6. Ball, C. F.: *Jour. A. M. A.*, February 21, 1914.
7. Bullock: *London Lancet*, January 30, 1915.

positive in about 68 per cent of cancer cases, and it is not a difficult test to make. The above three tests are general tests for cancer. In cancer of the stomach the Wollf-Junghans test has been studied by Smithies[8] of the Mayo clinic. It depends upon the demonstration of a large amount of soluble albumen in malignant achylias. Smithies concludes that it is of more diagnostic significance than is the absence of hydrochloric acid, the test for occult blood, gastric motility or the presence of lactic acid. It was not as constant as the demonstration of the Boas-Oppler bacillus, or the increase in the formal index. He found it positive in 80 per cent of gastric cancers, but it is not valuable as an early diagnostic method. Cytodiagnosis we owe chiefly to Loeper and Bivet; it depends for its value on the character of the cells obtained from the stomach washing. It is claimed that by this method the kind of gastric cancer can be diagnosed.

Gastric cancer is the most fatal as well as the most frequent of all cancers. The symptoms in the early stage are so often silent that a diagnosis is not made until late. Vague symptoms, referred to as dyspepsia, are often present and symptoms of gastric ulcer often precede the development of cancer, Graham says in 42 per cent, while in some cases the patient seems to pass from apparent good health, with little or no warning, to a condition of grave disease.

The *x*-ray bids fair to become a most important factor in the diagnosis of gastric cancer. But at the present time our main reliance is still to be placed in a carefully taken history and the clinical symptoms, aided by the usual laboratory methods.

Vague gastric symptoms in the middle aged should always excite suspicions of cancer and put the physicians on the alert. If, after careful attempts to arrive at a diagnosis, there is still reasons to fear the presence of cancer of the stomach or intestines, an exploratory laparotomy should be done to clear the diagnosis. The exploratory laparotomy to be of value must be done early, and it should be much more frequently resorted to than has been the custom in the past. Well developed cancer of the stomach runs a fairly typical course and is not very hard to diagnose, but diagnosis in that stage does very little good, comparatively.

Cancer of the intestine, exclusive of the rectum, is more frequent in the colon than in the small intestine. Symptoms here are very often silent, or at least not troublesome, until obstruction appears. Colicky pains, increasing constipation, the presence of mucous and blood in the stool, are the earliest symptoms of cancer of the colon; and these symptoms are sufficient to justify an exploration to determine their cause. Blake places the presence of tumor as an early symptom, but often it lies beneath the costal arch or there is a narrowing of the entire intestine and the mass is hard to feel until a fecal accumulation occurs above the constriction; in some cases of cancer of the caecum, diarrhoea is the initial symptom, but in the great majority of cases griping pains, increasing constipation and blood and mucous in the stool are the symptoms that attract attention first.

Cancer of the rectum should always be diagnosed in the early stages, because it causes hemorrhage early. The presence of fresh blood in the stool should always lead to a careful examination of the rectum for the cause. Most rectal trouble is diagnosed piles by the laity, and most doctors treat rectal trouble without making even a digital examination, and careful proctoscopic examination is very rarely done as a routine.

Cancer of the external surface of the body should always be diagnosed early for in that stage practically all of them are curable, but statistics show that the death rate from external cancer has increased quite as rapidly as that from cancer in other parts of the body. Precancer lesions are common and prominent on the external surface of the body and they should be recognized and treated before cancer has developed, in a much larger proportion of the cases than is now the case. A patch of seborrhoic eczema is the forerunner of many of the skin cancers of the face, and Montgomery thinks it is a frequent forerunner of carcinoma of the lip, and seborrhoic eczema is a curable disease.

Skin cancer is easy to diagnose. There is often a long precancer stage, sometimes lasting into years, and yet such cases often come to the surgeon with the neighboring lymph glands extensively involved. This is the kind of cancer that the so-called cancer specialist sometimes cures with his paste; his cures are extensively advertised, and he treats thousands of cases every year. To the unscrupulous quack and to the uninformed public, the term cancer conveys but one meaning; low grade, chronic skin cancer and the terribly malignant encephaloid cancer are the same to them, and if the paste will cure one they argue it should cure all. So it is that the quack and his confederate, the advertising pages of the press, go about the country preying upon the unfortunate victims of cancer; they not only take his money without due return, but they delay the time of proper treatment, which deprives him of the main chance of saving his life.

Cancer of the lip and tongue begin in a most innocent appearing lesion, a little wart or a scaling patch, that could be cured by a very slight surgical procedure in a great majority of the cases; yet many people still die of cancer

8. Smithies, Frank: *Amer. Jour. Med. Sciences*, 1914, p. 713, vol. CXLVII.

of the tongue and lip, for neither the laity nor the profession are sufficiently alive to the terrible possibilities of these insignificant lesions.

Cancer of the breast was thought to be an incurable disease up to twenty-five or thirty years ago, before the time of early diagnosis and radical operation. It should not be difficult to diagnose, because most of the diseases of the breast are either malignant or precancer conditions. According to the records of the Middlesex hospital for ten years, 70 per cent of all diseases of the breast that came to that institution for treatment were malignant. A nodule in the breast of a twenty-five year old woman is cancer in 50 per cent of the cases, and 90 per cent of the swellings in the breast of elderly women are malignant. Paget's disease always means that cancer is present in the milk ducts of the breast; it is not a precancer condition, it is an irritation due to the discharge that comes from a cancer that is already present. A woman with a small, painless nodule in the breast will not believe it can be cancer because she feels well, and has no pain. She perhaps recalls a friend who died of cancer of the breast, and she had pain, pallor, emaciation, ulcer and foul discharge; that is the picture the public has of cancer of the breast and unfortunately the physician too often demands those symptoms before he will make a diagnosis.

Cancer of the uterus is more frequent and it is more deadly than cancer of the breast. The warning signal is more easily detected in the breast than it is in the uterus. The nodule attracts the patient's attention quite easily as a rule. In the uterus a slight show of blood is the first sign. There may be an increased flow at the menstrual epoch, but it is the irregular show that is most important. Cancer of the uterus may occur in young women, but it is far more frequent after the menopause. A return of hemorrhage after the climacteric should always be carefully investigated, because it so often means a beginning cancer. Irregular bleeding and bleeding after the menopause, frequently associated with a watery discharge, are the only early symptoms of uterine cancer, and unless close attention is given to these deviations from normal, inoperable cancer of the uterus will continue to be of common occurrence. It must be remembered that when the change of life is once established, the menstrual function does not appear again; any further show of blood means a pathological state of some kind, very often cancer. Cancer of the uterus is curable if treated early, and radically. Early diagnosis and early treatment will go a long way toward banishing from the office and clinic the patient with inoperable cancer, that melancholy figure so familiar to the surgeon.

The results of the treatment of cancer up to the past ten or fifteen years justified the pessimism met with in so many quarters. More radical operations have been devised, and more extensive dissections undertaken until it would seem now that no further advance is possible in that direction. In the past few years pathologists and surgeons have been urging that the same perfection be striven for in diagnosis that has been achieved in surgical technique. They have pointed out that until we diagnose our cases earlier, the results of treatment can not be greatly improved. While surgical technique in malignant disease has been brought to a high degree of perfection in the hands of the masters, hundreds of poorly prepared surgeons everywhere are doing primitive and death dealing operations on the luckless cancer victims that fall into their unskilled hands.

Many investigators have tried to devise satisfactory nonoperative treatment for cancer. The paste now so commonly used by the specialist was familiar to our fathers; it has lost nearly all of its former popularity because it is not reliable; it is only applicable to the chronic superficial skin cancer, and we have remedies that far surpass it in that field. In a review of the nonoperative treatment of cancer, Clarke[9] mentions the work of Wassermann and Ehrlich in the treatment of mouse cancer by injecting an eosin-selenium compound into the vein; the tumor could be made to disappear by this treatment. Other investigators have preferred the colloid salts of the heavy metals, copper, silver, cobalt, etc. A few cases in man have been treated by this method, and while pain and the general symptoms are greatly relieved, the reports are indefinite and an opinion is not yet possible. The investigators in chemotherapy hope to find a remedy that has a selective destructive effect of the cancer cells and that will not hurt the other tissues of the body. Dr. Vaughan[10] has treated 200 recurrent and inoperable cases of cancer by means of a cancer vaccine which he prepared and in 20 per cent of his cases all visible signs of malignant tissue disappeared; 10 per cent have remained well for from two to four years. Ill and Minningham[11] report the results they obtained in treating 27 hopeless cases of cancer by injecting acitic fluid into them from a patient that had cancer of the liver. None of their cases were cured, but in all of them the pain and the general symptoms were greatly relieved. Coley's mixed toxins has been used for several years in the treatment of inoperable sarcoma with an occasional

9. Clarke, J. G.: *Progressive Medicine*, June, 1913.

10. Vaughan, J. Walter: *Jour. A. M. A.*, November 16, 1912.

11. Ill, Edward J. and Minningham, Wm. D.: *Jour. A. M. A.*, vol. LIX, p. 497.

cure, and carcinoma has been apparently cured by it.

Radiotherapy a few years ago became very prominent in the treatment of malignant disease; very extravagant claims have been made for it and some remarkable cures have been reported. In preparing this report, opinions were received from the following authorities on *x*-ray: Case, Davidson, Stover, Gray, Geyser, Newcomet, Hammond, Beck, Tousey, Brown, Baetjer, Granger, Mackee, Pusey, Cole, Johnson, Pfahler and Snow. Drs. Davidson and Stover have not in the past few years used the *x*-ray therapeutically and Dr. Geyser's results have been unsatisfactory. The others are unanimous in the opinion that it is most satisfactory in the superficial skin cancer; that it should be used postoperatively as a prophylaxis against recurrence of the malignant growth, and that it should be employed in inoperable cancers because it sometimes cures such cases, and nearly always benefits them greatly. Dr. Granger thinks preoperative radiation indicated in operable cases. Preoperative radiation is not considered good treatment. Prof. Bumm of Berlin, believes the *x*-ray should be used in the place of surgery in nearly all pelvic and breast cancers that are without symptoms of pressure.

Radium has aroused a great deal more enthusiasm than the *x*-ray. Dr. Abbe[12] of New York, has used it for ten years. He says that ulcers of the face of low grade malignancy respond well to radium, and while he says splendid results in the way of amelioration of symptoms are obtained by the use of radium in inoperable cases, he adds that nevertheless it is with a true sense of justice to the victim of malignant disease that one must still advocate early and complete surgical removal where possible. Bumm and Voigts of Berlin, Krong and Gauss of Freiburg and Werner of Heidleberg, reports results in uterine and breast cancer that give renewed hopes of conquest. Janeway[13] quotes Wickham of the radium institute of Paris: He says the action of radium is not sufficiently destructive to cancer cells to warrant its use as a primary therapeutic agent in any form of operable cancer, with the single exception of cancer of the skin. The same report comes from the London Radium Institute where they have four grams of radium, the largest amount owned by any single institution. At the London Institute and at the London Cancer Hospital, they refuse to use radium preoperatively in an operable case of cancer. Radium has a remarkable curative effect in sarcoma, if it has not become disseminated. The best opinion on the use of the *x*-ray and radium in the treatment of malignant disease, is that it should not be used in place of surgery in any case of operable cancer except in the superficial skin cancer. They are valuable as postoperative remedies to prevent recurrence, and in inoperable cancer. Heavy filtration of the rays of both the *x*-ray and radium, massive doses, and in the *x*-ray the cross fire principle and the use of the Coolidge tube, may in the future extend still further their usefulness; but for the present we must keep the radical treatment of cancer on the same sound surgical basis, where it has so long rested.

Cancer is in its beginning a purely local disease and if it is properly removed while it is still a local condition it will be cured in the great majority of instances. The old V operation for cancer of the lip, in the early stages of the disease, will cure about half of the cases but in the experience of Prof. Stewart of the University of Minnesota and of Dr. Beckman of the Mayo clinic, the radical operation which removes the submaxillary glands on both sides will cure a much larger percentage of cases. Beckman reports 99 cases of cancer of the lip in which he did the radical operation, with a cure in 83 per cent. The surgeon who cannot do a complete dissection of the neck has no moral right to operate on cancer of the lip, because he deprives his patient of more than 50 per cent of his chances of recovery.

In 1890, Dr. Agnew said he had never cured a case of cancer of the breast; that was because early and complete operations were not then practiced, as a rule. Bloodgood states that in those cases of cancer of the breast operated on at the Johns Hopkins Hospital before the clinical symptoms were sufficiently developed to establish a diagnosis, there were 80 per cent of cures; in these cases the diagnosis was made at the time of the operation, from the appearance of the cut surface of the tumor or from the frozen section. In those cases that came to operation with well developed clinical symptoms only 25 per cent were cured. The microscopic picture was exactly the same in both groups of cases, yet in the early cases there were 80 per cent of cures while in the later group there were only 25 per cent of cures. Cancer of the breast must always be treated by the radical operation; simple amputation is an inexcusable procedure in all cases that are operable, and a blind and bungling effort to dig the axillary glands out simply invites disaster. According to Bloodgood's statistics it is very dangerous to excise a piece of a malignant tumor *in situ* for microscopic examination, the operation for removal being postponed a few days or a week. In no case of cancer of the breast in which that was done in Bloodgood's series was there a five year cure. If a microscopic section is wanted from a tumor, the entire tumor must first be excised.

Cancer of the uterus kills a larger percentage

12. Abbe, Robt.: *Lancet*, August 23, 1913.
13. Janeway, H. H.: *Jour. A. M. A.*, May 30, 1914.

of its victims than does cancer of the breast, because cancer of the uterus comes to operation later and because the operation is more dangerous, and a complete operation is much more difficult, in some cases impossible. Rodman states that 90 per cent of the cases of cervical cancer are inoperable when they come to the surgeon. In New York City, according to the Registrar of the health department, 75 per cent of the women who die there from uterine cancer are not operated upon at all, or, at most, only a minor palliative operation, and of the 25 per cent who undergo the radical operation a considerable precentage were evidently too far advanced to offer much hope from the operation. Of 218 cases of cancer of the uterus seen by Peterson, from 1902 to 1912, only 51 or 23.4 per cent were operable. Dr. Taylor of the Roosevelt Hospital, operated on 70 per cent of the cases that came under his care in 1910. At Howard Kelly's clinic about 54 per cent are considered operable, and Dr. Weihle of Vienna, reports an operability of 50 per cent. To establish operability an anesthetic is often needed and frequently a laparotomy is required.

In 1898, Wertheim reported his operation for cancer of the uterus. It is a most radical procedure, and, undoubtedly, it is the ideal operation. He makes an extensive dissection of the pelvic glands as well as a wide removal of the parametria and a cuff of the vagina. In the old, simple hysterectomy, recurrence was most often seen in the vaginal vault and the parametria. The Wertheim operation has a high primary mortality. In his first 100 cases it was 30 per cent, in his fifth hundred only 15 per cent. Peterson in his first 14 cases lost 42.8 per cent, in the next 37 only 10.8 per cent. In Kelly's clinic there was a primary mortality of 20.5 per cent in 136 cases. Dr. Clark of Philadelphia, does an operation similar to the Wertheim, except he does not go after the high pelvic glands. He says the primary mortality is too high, and that it has been shown that the pelvic glands beyond the parametria are involved in only about 35 per cent of the cases that come to operation, and that practically all of them die of rapid recurrence. The extensive dissection of the pelvic glands increases the mortality considerably, without compensating for it by curing a larger percentage of cases. Kelly[14] has come to the same conclusion, and the Wertheim operation has been abandoned in his clinic. Peterson says that he leaves the glandular dissection to the last part of the operation so that he can abandon that part if the patient's condition is growing too bad. He thinks it should be done where possible. The vaginal operation has the weight of surgical experience square against. It is generally agreed, however, that it is the operation of choice in the very weak and in the obese. The radical abdominal operation has a high primary mortality, but it saves more of these patients than any other operation, and the saving of life is the highest aim of surgery. The surgeon who is afraid of mortality had better leave the radical abdominal operation alone, and stay by the simple abdominal operation with its low primary mortality and high mortality from recurrence; his chief aim is not so much to cure the patient as to get them over the operation. Kelly's clinic reports a five year cure in 35 per cent of the patients recovering from the operation. Weihle of Vienna, reports a cure of 43 per cent of all the operated cases, and 53 per cent of all who survived the operation. At the time of Peterson's article, 14 of his patients had been operated on five years or over, and 35.7 per cent were still living and well.

Cancer of the stomach is curable if operated early. Mayo reports a five year cure in 25 per cent of their operated cases, and he thinks with our present diagnostic methods 50 per cent of the cases should be diagnosed in the operable stage. Wide removal of the growth and neighboring glands is the operation indicated and it is not an especially difficult procedure. Gastric ulcer, so often precancerous, should be excised more often than is now the custom, and we must make more frequent use of the exploratory operation in obscure gastric conditions.

Early operations in cancer of the rectum will cure most cases, for cancer of the rectum is usually adeno-carcinoma, which has a moderate malignancy only; but cancer of the rectum is usually treated under the loose diagnosis of piles until late. There is no excuse for failing to diagnose that disease if the patient seeks advice early.

Cancer of the skin is very curable, it usually runs a slow course and is very often preceded by a chronic precancer lesion that is curable. Space will not permit discussion of cancer of other regions. The main and the crying need in cancer is early diagnosis; the public must learn that cancer has a most innocent beginning in practically all cases, and that in the beginning it is curable in practically all cases; they must also learn that it is the disease that kills in the neglected cases, not the operation, and *we* must learn that a late diagnosis can never be atoned for by a more extensive operation.

The public needs information, and it will act on that information when it becomes convinced. We believe the public can be informed through the medium of women's clubs, the lay press and public health lectures, and we believe the medical profession would derive great benefit if the county societies would devote at least one meeting each year to the discussion of cancer,

14. Kelly, H. A.: *Surg. Gyn. Obs.*, 1913, p. 239, vol. XVII.

and if the STATE JOURNAL would print an occasional symposium on that subject. We believe it would be wise to teach the early symptoms of cancer to the trained nurse, so that she could instruct the people with whom she comes in contact.

The American Society for the Control of Cancer has given us valuable aid by way of furnishing reprints, and information about other writings on cancer, and we wish to take this occasion to express our appreciation.

FACTS VERSUS SPECULATION IN THE PROFESSIONAL CONCEPTION OF CANCER.*

BY

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That there is an unsettled condition of the professional conception of cancer and that this condition is the result of incomplete observation and speculation, is perfectly clear to any student who has carefully compiled the literature upon the subject.

The cancer problem involves four distinct considerations, first, the question of how cancer develops (histogenesis), second, why cancer develops (etiology), third, how cancer can be prevented (prophylaxis) and fourth, how can cancer be cured after it has developed (therapeutics). The discussion in this paper will deal only with the first of these four questions, namely, the histogenesis or development of cancer.

Perhaps the best method of realization of the chaotic conception, which undoubtedly exists, is to review the published expressions which are utilized to explain cancer and other tumors. Thus we find the development of tumors spoken of as: An inherited pathological quality of cells; a failure of cells to differentiate; a disturbance of the idioplastic formation of cells; the formation of a "new race of cells;" a prenatal separation of cells; a postnatal separation of cells; a primary inherited change in the nature of cells; a change in the biological behavior of cells; a product of connective tissue senility; a specific tumor diathesis; a nutritional disturbance of the equilibrium of vegetative and functional cell power; a change between the relation of nerves to cells; a reduction of the avidity of the body cell; a primary emancipation of cell growth from the normal laws of growth, as cellular atavism; a return to the embryonic condition of cells; an inherited or acquired intra-cellular abnormal metabolism; a cessation of the regulating growth influences of cell differentiation; a heteroplastic change of the fixed connective tissue cells; a prenatal separation of cells, as congenital anlagen; a release of the organic connection of cells; a separation of germinal cells; an embryonic separation of cells; a shunting of germ cells from their normal relations without misplacement; superfluity in the development of cells or tissues, as separated germ cells; misplacement of cells, and an abnormal persistence of embryonic cells. This multiplicity of explanations in itself indicates dissatisfaction with the lack of accurate or scientific knowledge which we possess relative to the condition.

The three fundamental things in life which make that which we know as science are the observation of facts, the inductions of laws or generalizations from the observed facts, and the verification of the facts, laws and generalizations by experimentation. These three conditions of science are often subject to error through false or incomplete observation of facts, the induction of laws from too few or false facts and the frequent human inability to reproduce natural phenomena, whereby experimentation may be done to confirm the laws or generalizations. In spite of these stringent demands of science in the establishment of truth man has been forced to live and think in terms of generalizations and laws, a fact which may be seen in the history of any of the natural sciences. Laws and generalizations have been the most prominent instruments of progressive thought.

In the field of medicine Julius Cohnheim in 1877, expressed a generalization in the following words: "I believe that this process—referring to the embryonic development of the *monstra per excessum,* such as superfluous fingers, giant children, giant adults, giant extremities, etc.—is not confined to this field but also applies to a much wider and more important field, namely, the field of true neoplasms." By this generalization he meant that the neoplasms and the *monstra per excessum* were probably due to some excess in the embryonic development of tissues. This is the generalization which stands out most prominently in the pathology of tumors and is the one which is given preference in practically all modern text-books on the subject. Later Ribbert added to Cohnheim's prenatal hypothesis another one, which explained neoplasms by a postnatal cutting off of cells in scar-tissue.

The evidence which has been produced to establish or support the prenatal and postnatal rest hypotheses for the origin of tumors may be divided into three groups, *i. e.,* the facts relative to the the occurrence and anatomical location of tumors, the published speculation relative to how they occurred, and experimental

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*From the Mayo Clinic.—Read before the Joint Session of Scientific Sections, State Medical Association of Texas, Fort Worth, May 5, 1915.—Contributed by the Section on Pathology.

observations which were made as a result of the hypotheses.

The speculation has already been mentioned and the anatomical observations may be briefly stated as follows:

(1) Tumors do occur.

(2) Some monstrosities, the duplex anatomical abnormalities, bilateral abnormalities, superfluous fingers, giant children, giant adults, elephantiasis of one or more extremities, inequality of growth in bilaterally symmetrical organs such as arms and legs, have an embryonic origin. Cohnheim says: "It is no mystical conception if we accept the embryonic anlagen as the cause of these excessive growths."

(3) Some tumors occur in the localities of occasional developmental defects, such as the orifices of the nose, eyes and lips and the tracheal bifurcation of the esophagus.

(4) Naevi and moles occur usually as prenatal abnormalities.

(5) Naevi and moles occasionally become malignant neoplasms.

(6) As a result of segmentation of the fertilized ovum three distinct embryonic layers develop, out of which the specific tissues of the organism arise (Wolff 1759, Meckel 1812, Ponder 1817, von Baer 1829, Remak 1851-1855).

(7) The condition known as carcinoma is of epithelial or ectoblastic origin.

(8) Sarcoma is of connective tissue origin.

(9) Tumors which contain tissues not normally found in the region in which the tumor developed, occur; thus gland-like structures are found in gliomata of the brain, spinal cord and retina. Gliomata with cystic areas which are lined by epithelium, have been seen in the 4th ventricle. Lipo leiomyomata of the kidney have been described. Striped muscle tumors in the uterus, vagina, kidney and testicle are reported. Cartilagenous growths in the tonsils, neck, thyroid, breasts, testicles, kidneys and bladder are mentioned. Teratomata in the vagina, uterus, kidneys, bladder, breast, parotid and ovaries are rarely found. Glands are found in uterine myomata.

(10) Tumors such as ovarian neoplasms, naevi, lipomata, angiomata, myomata and sarcomata of epiphyses are occasionally bilaterally symmetrical and exostoses; enchondromata, adenomatous polyps and papillomata are sometimes multiple.

(11) Tissues which are analogous to normal tissues are occasionally found in locations where they are not normally found. "Adrenal rests" have been described by Ribbert and others. Epithelial vestiges known as Wolff-Gartner ducts in the uterus, and adnexa occur. Epithelial rests cut off in the scar tissue of ulcers and burns were emphasized by Ribbert and others.

(12) Accessory organs such as the thyroid, breast, pancreas and spleen are occasionally found.

These abnormalities lent circumstantial evidence in support of the speculative generalizations of Cohnheim and Ribbert. Although all of these facts do not represent the basis of Cohnheim's generalizations, they do represent the most important and most often quoted facts in support of the rest hypothesis as popularized by Cohnheim, Ribbert and their followers. Briefly, these may be analyzed in their relation to the hypotheses in the order in which they have just been mentioned.

No attempt is being made here, however, to disprove the circumstantial evidence which has been presented in support of the prenatal and postnatal hypotheses. The evidence herewith presented is simply circumstantial evidence, which has equal value in a negative or contradictory consideration of the hypothesis.

1. Tumors certainly occur but all tumors are now known not to be alike and many conditions which were considered under the heading of tumor when the Cohnheim-Ribbert hypothesis was formulated have been proven to be neoplasms which are due to infectious organisms which gain postnatal entrance into the body. Many, in fact most of the carcinomatous and sarcomatous neoplasms, are conditions which manifest themselves after or during chronic irritation. This is well exemplified in carcinoma in association with ulcers of the stomach, epitheliomata in association with irritation of the lip from smoking and repeated or constant sunburns and sarcoma which follows injury, all of which, and many more examples are strong evidence that some other factor plays a role in the development of such neoplasms. If the irritation happened to strike a spot in which there were already prenatal rests, then prenatal rests must be frequent enough to be found in the areas which are so frequently the seats of neoplasms.

As a matter of fact, literature and experience are strangely devoid of authentic examples of rests in the common seats of cancer. That the cells of cancer are derived from cells which are present is to be conceded, but that these cells must necessarily be cut off physically or functionally during embryonic or postnatal life

seems unnecessary in the light of findings which appear in other parts of this paper.

2. Monstrosities occur but many of these are the results of purely mechanical defects and are not neoplastic. Giant colons in some cases have been due to an absence of a portion of the bowel, an absence most likely due to the failure of the two embryonic portions of the bowel to unite during embryonic development. The tumor in such cases is not neoplastic in the sense that a carcinoma or sarcoma is neoplastic. In most cases they are merely distensions of the lumen of the bowel. Elephantiasis is frequently due to prenatal or postnatal mechanical obstruction to the returning lymph or blood supply. The condition is also composed of differentiated cells and not partially or undifferentiated cells which are characteristic of neoplasms.

Bilateral abnormalities, like the monstrosities, *possess completely differentiated tissues* and do not consist of masses of *undifferentiated hyperplastic* cells such as characterize carcinoma, sarcoma and many benign neoplasms. Giant children and adults, while they certainly have their initiative in their own embryonic cells, are merely manifestations of the extremes of growth. They have a limit, the limit of differentiated tissues and do not manifest the unlimited growth of benign and especially malignant neoplasms. Variability of size in all living things occurs normally; there must be extremes. It is no more remarkable than the great variability of size of flowers on plants of the same species. They consist of normal tissues which are normally correlated and differentiated; their development is not detrimental to the symmetry or existence of the tissues or the whole organism, a distinction which is to be compared with the characteristic assymetry and detrimentality of neoplasms.

3. Tumors do occur in localities of occasional developmental defects but these are rare when compared with other conditions such as carcinoma of the stomach, skin, prostate and breast, in which organs developmental abnormalities have not been discovered with as great frequency as in such regions as the face.

4-5. Naevi and moles are usually of prenatal origin but when compared with the number of moles and naevi in existence, malignant naevi and moles are extremely rare. Indeed, the condition is rare when compared with other malignant conditions which do not arise in moles and naevi and have no apparent relation to any abnormality as an antecedent.

6. Carcinoma is conceded to be of epithelial, therefore, ectoblastic origin, but the cells of carcinoma and the cells of sarcoma are often morphologically indistinguishable and frequently bear no cytologic resemblance to the parenchyma of the tissues from which they are supposed to have grown.

7. Although sarcoma is supposed to be of mesoblastic origin, the cells are often morphologically indistinguishable from cells of epithelial or ectoblastic origin.

8. That tumors occur which contain tissues not normally found in the region in which the tumor grew, is certainly true, but it has been demonstrated that the adenomatous or glandular tissue of an adenomyoma of the uterus has its origin directly from the endometrium of the uterus as diverticula. It may be suggested also that the much quoted mixed tumor, namely, the glioma of the brain and cord which contains gland-like structures, is a condition in harmony with the fact that both central nervous tissues and certain gland tissues develop from the same stratum germinativum. Indeed, the variety of very different structures which are derived from the stratum germinativum of the ectoderm gives to that layer the possibility of producing many tissues; for example, in the same cyst of a breast, one may find squamous cells, cuboidal cells, and cells which are indistinguishable from sebaceous cells. It must not be forgotten that cells which normally produce columnar epithelium may produce squamous epithelium when those cells are placed in the position where squamous epithelium is demanded for protective purposes. It must be remembered also that within the compass of a single cell, namely, the fertilized ovum, all tissue possibilities exist. This clearly demonstrates the biological fact that protoplasm is a plastic substance which readily adapts itself to abnormal environment. Conditions which are called "adrenal rests" in the kidney do occur but nobody has actually demonstrated that such structures were really adrenal cells. Their analogy may be similar to the analogy which exists between cells of sarcoma and carcinoma, spindle cells sarcoma and epithelioma.

9. The bilateral symmetry of rare neoplasms as bilateral fibromata, lipomata and naevi, is in accord with the bilateral symmetry of many organs. Thus many bilateral axillary lipomata have been proven to be bilateral rudimentary or accessory breasts. The bilateral symmetry of the mammary gland does not especially predispose to bilateral carcinoma of the breast, although this condition does rarely occur. Bilateral ovarian simple cysts, cystadenomata and dermoids of the ovary, do occur but, the condition is more frequently single when found by the surgeons. Bilateral symmetry of fibromata of the nerves occurs, but there are some bilateral irritative conditions of nerves of known postnatal origin.

10. Accessory organs occur frequently, but rarely do we find neoplasms in such structures,

especially rare when compared with the neoplasms which arise in structures which are not accessory.

11. Multiple tumors occur in many parts of the body, but here also they are associated with irritation which is also multiple or diffuse.

12. The so-called law of specificity of tissues from the three embryonic layers is open to criticism of modern biologists, since it has been shown that in the regeneration of certain organs and tissues of some animals these tissues arise from different layers. The regenerated lens in the triton arises from a mesoblastic tissue in spite of the fact that the lens normally develops directly from the ectoblast. Muscles in the Tubifex Rivulorum are regenerated from ectoblastic structures although they are originally mesoblastic.

Hertwig says that the terms, outer, inner and middle germinal layers, denote only the relative position of the cells which develop at different times and he reminds us quite appropriately that the entoderm and the mesoderm are both derived from the cells of the ectoderm. He further shows the incompleteness of our present knowledge of the germ layers by stating that it is still a question whether the chorda develops from the ectoderm, mesoderm or entoderm, in so simple an animal as the amphioxis.

Whether the middle layer is derived from the outer or inner layer, or both, is still an open question. As to the morphological specificity of cells from these layers, it may be stated that many cells of moles are morphologically identical with connective tissue cells, although they may be directly traced by continuity to the epithelium of the skin. Indeed, such cells are often indistinguishable from the cells of spindle cell sarcoma and myoma, both of which are supposed to be of mesoblastic origin. Cells from an epithelioma (ectoblastic) of the skin are frequently morphologically indistinguishable from the cells of a sarcoma (mesoblastic).

The embryologists tell us that the epithelium of the kidney is of mesoblastic origin and still many neoplasms of the kidney are morphologically carcinoma. From these facts it seems that the law of specificity of tissues has many exceptions and begins to lose its morphological and functional specificity when studied from the standpoint of cytology.

The experimental evidence which was conducted by such authorities as Wilms, Lubarsch, Ribbert, Kaufman, Schweniger, Dooremal, Goldzieher, Garre, Kaig, Jungengel, Goldmann, Mangoldt, Thiersch, Riverdin, Krause, Barth, A. Schmidt, Moller, Allessandri, Futterer, Zahn, Leopold, Birsch-Hirschfeld, Rosario Traina, Bom, Tranhel, Nichols, Lecine and Legros, Roux and Barfurth, consisted of transplantations of embryonic and adult tissues into normal organs of animals of the same and different species and the artificial misplacement of cells and tissues in animals in their embryonic stage. In all cases in which the cells or tissues lived the cells remained or became differentiated into the cells of the normal tissues from which the injected or transplanted cells were taken. The transplanted tissues ceased to grow and in no case was a typical neoplasm produced.

Lewin states, in summarizing these experiments: "Out of all of these experiments no atypical growths with progressive tendency to growth occurred. Teratomata occurred but metastases did not occur. The growth showed a tendency to retrogress." Borst states: "There still remains much which is lacking and uncertain in the use of experiments which in other investigations have proven so advantageous. They have given no success in the field of tumor formation. At least, no one has been successful in producing experimentally a true blastoma. In general one may say that the histogenesis of tumors is a field of oncology which has not been sufficiently cleared up."

It may be seen that those of the profession who accept the prenatal or the postnatal rest hypothesis for the histogenesis of tumors, do so from speculation and circumstantial evidence and not from observational or experimental proof.

In the brief space of time allotted for this paper the principles of the new conception of the development of neoplasms may be best illustrated by studying one organ, although similar facts have been demonstrated in several organs. In over 846 carcinomata of the mammary gland, I have never seen the condition unless it was associated with a definite chronic mastitis. In over 1,189 specimens of chronic mastitis I have found histological pictures which present changes, without demarcation, to and including the picture of early carcinoma.

The normal breast is the direct outgrowth of the germinative or basal layer of the embryonic skin. The tubules and the acini possess two layers of cells, one consisting of differentiated or functionating cells, the other a basal layer, the cells of which are difficult to distinguish in the normal resting or lactating breast, but which come into prominence only in chronic mastitis.

The function of the basal cell layer of the skin is to reproduce the epidermis when this is destroyed. The same layer in the mammary acinus comes into prominence only when there is destruction of the functionating cells of the acinus. Its function is that of regeneration, a protective process. In acute or extensive destruction of the skin, including the basal layer,

the defect is replaced by scar-tissue. In acute or extensive destruction of the mammary acini the defect is also replaced by scar-tissue. In chronic irritation of the skin there is an increased production of cells. In chronic irritation of the breast there is likewise an increased production of cells. In other words, there is an attempt to replace the normal functionating cells. Failure in the complete replacement of the differentiated cells is accompanied by an overgrowth of the cells of the germinal or basal layer. This condition has been termed by the writer secondary epithelial hyperplasia. The cells fill the lumen of the acinus and are morphologically identical with the cells of cancer, although none invade the stroma at this stage. From the fact that these cells are morphologically identical with cancer cells and that the only apparent line of demarcation between the condition and cancer consists of a migration of the cells into the stroma, it has been termed by the writer the precarcinomatous condition.

Viewed from a biological standpoint there are certain processes which are visible in the conditions just described. Nature provides certain cells (germinative cells) the duties of which are to act as a reserve to reproduce the specific organic cells when the latter are destroyed. She provides that the process of regeneration be accompanied by over-growth, a condition which is characteristic of all reproduction in most, if not all, forms of life. She further provides for the migration of living things when environmental conditions are not suitable for local existence.

The condition of migration in the case of cells has been described by the writer as tertiary or migratory hyperplasia. The cells of carcinoma of the breast represent the biological principle of migration of cells. The cells, as Hertwig has stated, have lost their organic or communistic function and have taken on their cytologic or individualistic function, the latter being to preserve their kind from annihilation.

It may be asked, how can a condition which will certainly destroy the whole organism be a protective principle? This perfectly natural question can only be answered by stating a general principle in biology, namely, that regenerative changes do not always consider the adaptation of the whole organism. Thus, scars which are regenerative after destruction often completely or partially incapacitates a limb and thereby are disadvantageous, often a detriment to the whole organism. It is a manifestation of a principle which is inherent in cells, cytologic life being primary and organic life secondary. Thus the planarian, a low form of multicellular organism, in response to certain stimuli produces a new head when it already possesses one; the actinian produces a new mouth on the side of its body, under certain regenerative conditions, etc. Migration of animals not infrequently leads even to their complete destruction or to the destruction of other kinds of animals. Life exists at the expense of life, a fact which, like many other biological facts, will doubtless never be understood until the ultimate purpose of life is known.

In review, it may be seen from an examination of the literature, the best of which is herein quoted, that the prenatal and postnatal conception of the histogenesis of tumors is based upon a generalization for which there are no observations of facts relative to the actual development of neoplasms and no experimental proof which is in accord with the hypothetical conception, expressed in the prenatal and postnatal hypothesis of Remak, Durante, Cohnheim, Ribbert and their followers.

It is a conception, formulated at a time when the term tumor embraced many apparently different pathologic conditions, some of which have since been shown to have definite postnatally acquired parasitic character and associations which have nothing to do with either prenatal or postnatal anatomical development of tissues other than that their normal special structure may form a portal of entry or is in communication with some portal of entry, for a tissue destroying organism or irritant which causes a tissue reaction in the form of a neoplasm.

It was further an out-growth of the so-called germ layer theory of embryological development, a theory which, according to Hertwig, seems to leave out of account the biological fact that the so-called germinal layers are but a few generations, perhaps even one generation from each other and that all of these layers are but a few generations from the ectoblastic layer. Indeed, it is not absolutely settled whether the mesoblastic or middle layer is of ectoblastic or endoblastic origin. Some authorities consider it a direct derivative of both layers.

It is further based upon another theory called the theory of specificity of tissues (Kolliker,) which is open to criticism for the following reasons: In the regeneration of the muscles of the tubifex rivulorum they are derived from the same cells which form the nervous system (Ectoderm); in the tubifex rivulorum the pharynx arises from distinct germ layers; the regeneration of the lens in the triton has its origin in mesodermic cells and not in ectoblastic cells.

Such a conception leaves out of consideration the most evident and essential characteristic of cells, namely, the power of reproduction or regeneration. It also leaves out the fact that the specificity of tissues consists of specific differentiation of cells, a condition which repre-

sents the final adult stages of cellular life and not the reproductive or plastic stages. Hair does not grow from hair, the nails do not grow from nails, squamous epithelium does not arise from squamous epithelium. These specific end products are the offspring of germinative cells which produce hair, nails and epithelium by the individual power of differentiation of germinative cells, which occupy an absolutely essential and much over-looked position in the economy of an organism such as the human body.

Conclusions.

1. The prenatal and postnatal theories of the development of neoplasms are based upon no observational or experimental evidence.

2. They were working hypotheses based upon anatomical locations which were identical with certain complicated embryological developments and two theories, namely, the three layer theory and the specificity of tissues theory, both of which are still open to criticism of modern biologists.

3. Certain facts prove that for certain organs such neoplasms as carcinoma and epithelioma are the direct descendants of cells which are normally present in those organs and which have a distinct normal postnatal function of regeneration.

4. Facts further prove that these generative cells take part in a local reaction which attempts to replace cells which have been destroyed by some chronic irritant.

5. Biological facts prove that most if not all unicellular and multicellular organisms migrate to protect themselves from extermination and that this regenerative activity is often irrespective of the welfare of the whole organ or organism.

6. The formation of neoplasms may be expressed as an attempted protective hyperplasia of germinative cells, a fact and not a theory.

7. This conception of neoplasms possesses three definite histological pictures which may be described by three definite terms or expressions which require three distinct clinical and therapeutic procedures and form a definite basis for a new classification of tumors, which will be presented in the near future.

Warner's Safe Remedy.—"Warner's Safe Remedy for the Kidneys and Liver and Bright's Disease," is reported by the A. M. A. Chemical Laboratory to contain alcohol, by volume, 14.40 per cent, glycerine, by weight, 7.72 per cent, potassium nitrate 1.75 per cent and vegetable extractives. This preparation consists essentially of alcohol and potassium nitrate. Alcohol is contraindicated in inflammatory diseases of the kidneys and potassium nitrate is a kidney irritant. Sufferers from kidney diseases who take Warner's Safe Remedy will shorten their lives. (*Jour. A. M. A.*, December 19, 1914.)

WHAT THE PUBLIC SHOULD KNOW ABOUT CANCER.*

BY

A. C. SCOTT, M. D.,

TEMPLE, TEXAS.

Much of the world's progress during recent years has been due to scientific work of the medical profession in the prevention and cure of disease hitherto disastrous to the human race in all parts of the world. I only have to remind you of the absolute prevention of smallpox where vaccination is made compulsory by national law; the prevention and prompt cure of diphtheria by antitoxin; the absolute prevention of lockjaw in all injuries where antitetanic serum is administered early; the exclusion of typhoid fever by vaccines from the armies of the world, where typhoid vaccines are systematically used; the stamping out of yellow fever and malaria, as wonderfully demonstrated in the final success of the Panama Canal, a zone formerly as fatal to the white race as the jungles of Africa, now one of the healthiest spots in the world. Through the various organizations for the prevention of tuberculosis, I am happy to say that in some states the annual death rate has been reduced as much as 50 per cent. It is with the same spirit that we are now turning our attention to the subject of cancer.

There are, of course, many things about cancer which are not known or understood and in undertaking to educate the public upon the subject we should endeavor to avoid, as far as possible, detailed discussion of those things which are still subject to controversy. This article having been written for the benefit of both the physician and the laity, deals frankly with the former and for the better understanding of any of the laity who may be present or have occasion to read it, avoids the use of technicalities as far as practicable.

With all due deference to the medical profession, much of the ignorance and mismanagement of this disease is not due altogether to the ignorance of the public upon the subject. Unfortunately, many members of the profession are both ignorant and neglectful of their duty relative to early diagnosis and sensible advice to their patients. This is, indeed, regrettable, not alone because of its reflection upon the medical profession but because the education of the public depends, in a great measure, upon the medical profession, which seems to be in a measure unprepared for that tremendous task.

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*Read before the Joint Session of Scientific Sections, State Medical Association of Texas, Fort Worth, May 5, 1915.—Contributed by the Section on Medicine and Diseases of Children.

Notwithstanding this fact, a campaign of education was begun, thanks to the Gynecological Section of the American Medical Association, several years ago, when it requested the House of Delegates to appoint a committee to investigate the problem of educating the public on cancer of the uterus. Soon afterward a number of State Committees were appointed, one of the most active of which was a committee from the Pennsylvania State Medical Society, with Dr. Wainwright of Scranton, as chairman. Later on the Clinical Congress of Surgeons appointed a Cancer Campaign Committee, with Cullen of Baltimore, as its chairman, and in May, 1913, the American Society for control of cancer came into existence. About the same time the lay press, through the medium of *Collier's Weekly, The Ladies Home Journal* and *McClure's Magazine,* took up the matter of educating the public, through the writings of Samuel Hopkins Adams.

Not the least notable among the different agencies now actively engaged in this sort of education, is the Council on Health and Public Instruction of the American Medical Association, under the leadership of its able secretary, Dr. Frederick R. Green. This council is very active in stimulating contributions pertaining to the subject of cancer control, attends to the publication of such articles as are considered of particular educational value and makes proper distribution of them to both the medical and lay press.

Since the beginning of this educational campaign, statistics obtained through the statistician of the Prudential Life Insurance Company of New York, have revealed the astonishing fact that more than 75,000 people die annually in the United States from this disease alone. These statistics come chiefly from those parts of the country where public records are kept by direction of the law, and by no means represent the entire annual number of deaths from cancer.

Investigation by Dr. Wainwright, chairman of the Cancer Commission of Pennsylvania, shows that 32 per cent of superficial cancers and 52 per cent of deep-seated cancers, were inoperable when first seen by the surgeon—that is, beyond any human help. These facts clearly indicate the imperative necessity for education, both in and out of the medical profession.

The time has come when no intelligent physician should ever repeat the old fatal error of advising a patient to wait and see what will develop, when consulted regarding the presence and character of any unnatural growth, lump, tumor, ulcerated surface or indolent sore about the body, or any unnatural discharge or condition which has been known in the past to precede the development of cancer. Many of such conditions are known as precancerous diseases and are often readily recognized by progressive physicians.

I do not know of any more embarrassing situation than that which arose recently when a mother of a large family of children came to me with the history of a small lump in the breast observed nearly two years previously and about which, when first noticed, she consulted her family physician. Her physician replied that he did not think it amounted to anything and advised a waiting policy. She had taken his advice and waited until pain began to develop, and through the advice of some neighbor lady finally sought surgical relief at a time when there was definite evidence that the disease had extended to the armpit, base of the neck and within the chest. At the time when operation was absolutely out of the question, the physician became very anxious to have some operative procedure resorted to regardless of consequences. A month rarely passes that we do not see a number of illustrations of such errors on the part of the medical profession. Fortunately, the leading members of the profession are becoming quite awake to the situation and by prompt and painstaking examinations are avoiding errors of this kind more and more, and it is now clearly the duty of physicians and humanitarian organizations everywhere, to educate the public very carefully upon those things which they are able to grasp.

The public should be made acquainted with the fact that more than 75,000 people die annually of this disease; that after they have passed the age of forty cancer is more frequent than tuberculosis, pneumonia or typhoid fever, and above all else they should know that it is a preventable disease and a curable disease. There are some members of the profession who may gasp at these unqualified declarations, without stopping to think of the various predisposing causes of cancer which may be easily remedied, and who fail also to consider the fact that cancer is always purely local in its beginning and therefore amenable to surgical cure.

Very recently I witnessed the removal of the uterus of a woman 58 years of age, who though having passed the menopause six years ago, presented a history of slight recurrent bleeding from the uterus during the past eight months. She had had the uterus scraped twice by a good physician, with the laboratory report that the uterine scrapings showed no sign of cancer upon the first occasion, and only a suspicion of cancer upon the second. Examination of the uterus after its removal revealed the fact that there was a small cancerous growth, not much larger than a pea, in the upper part of the uterine cavity. A permanent cure may be reasonably expected in such a case.

The morbid dread of cancer and the mystery surrounding its origin are, in a great measure, responsible for the reluctance of most people to consulting a physician. One of the most detrimental impressions, which is quite prevalent, is that removing or cutting moles, warts, tumors and indolent sores of various sorts, is liable to result in cancer, or its rapid spread if it already exists. This idea has probably grown from the following circumstances: (1) Cutting into malignant growths, without complete removal, has undoubtedly stimulated a more rapid spread of the disease. (2) Attempted removal of cancer after it has scattered to other parts seldom succeeds, and is often the first news the neighbors and friends receive concerning the ailment. (3) Such ill-advised operations are often hastily followed by fatal consequences. Thus it is seen that the medical profession, by its ignorant acts or poor judgment in operating upon late cases, is, in a measure, responsible for a wrong impression, which overshadows much of the good that might come from prompt investigation and early radical treatment. This is also exaggerated by all sorts of quacks, cancer specialists, osteopaths, Christian Scientists and, I regret to say, some few regular physicians who have an unreasonable and unwarranted antipathy to any manner of surgical procedure.

The public should know that certain diseases or lesions are conducive to the development of cancer; that some of them are external and easily discovered and others internal and often give only vague warnings of discomfort, such as indigestion, leucorrhoea, slightly disturbed functions, etc. They should know that moles, warts, persistent scabby places about the face, neck and back of the hands; that any sore on the lip or tongue which does not heal in four or five weeks time, and stay healed, if not cancer already, may be a predisposing cause of cancer, and should always excite sufficient suspicion to demand prompt attention and, if need be, radical operation. Everybody should know that pain is frequently absent in the earliest stages of cancer, and is usually absent in those diseases which predispose to cancer. Therefore, to consider a lump, sore or ulcer as being harmless because it does not pain, is often a fatal error.

On the other hand, everyone should know that gall-stones, ulcer of the stomach and appendicitis, are often conducive to cancer in their respective localities, long after they cease to pain and have appeared to undergo spontaneous cure. Therefore, the period of apparent recovery from such diseases, together with the many boasted cures on the part of advertising gall-stone and appendix specialists, stomach specialists, osteopaths and Christian Scientists, are sometimes only the forerunners of cancer which, when it makes its presence known, is often beyond the reach of the most skilled surgeon.

Every woman should know that the chronic, scabby, bleeding condition of the nipple, usually seen after the age of forty, means Paget's disease, a serious type of cancer of the breast, and that when she waits for the development of a tumor, she waits for it to become incurable.

It is only by the most careful investigation that any kind of a lump in the breast may be distinguished from cancer, or a disease predisposing to cancer, and in any case where the question cannot be definitely settled by a competent physician; in other words, in any case where a competent physician cannot decide positively that the disease is not cancer, the patient should be given the benefit of the doubt and the growth removed for microscopic examination.

Every woman should know that the normal change of life does not lead to increased flowing, which is always suspicious, and that the return of any bloody discharge after having passed the menopause warrants prompt and thorough investigation, in as much as it means cancer more frequently than any other disease.

Every woman should also know that more than half the women who have borne children, have suffered some degree of laceration of the womb which, if it gives rise to degeneration, indicated by a chronic leucorrhoeal discharge, should be classed as a predisposing cause for cancer by the time she is 35 or 40 years of age, and that the only way to fortify against such an occurrence is to either have the laceration repaired, or to submit to speculum examination at repeated intervals when that danger period arrives. Some may argue, "such a large number of women who suffer laceration of the womb do not have cancer, that this advice is superfluous and going to an extreme," but when I remind you that in these United States over 10,000 women die annually from cancer of the female organs of generation and that more than 15 per cent of all deaths from cancer come under this class, it will, perhaps, be realized that no extreme which requires precautionary measures, is too great for all women to go to, if they may, by so doing, only occasionally save one of their number from this horrible affliction.

It is not uncommon after the menopause has passed for menstruation to return. The patient consults her old reliable family physician. He does not want to trouble her with an examination, prescribes a douche and advises her to "wait and see." A few months later, perhaps, she develops a foul leucorrhoea, accompanied by more marked bleeding and also pain and cachecia, and suddenly it is discovered that she

has developed an incurable cancer, which might have been easily cured upon the first sign of returning menstruation.

Some of the saddest experiences of my life have arisen from the duty of having to inform patients that it is too late to attempt any curative measures, and I am often reminded of Whittier in his love story, Maud Muller, "For of all sad words of tongue or pen, the saddest are these, it might have been." Physicians and people alike await for the development of the late symptoms of cancer before they become alarmed, and they should all know that if they wait for a lump to begin growing, for the appearance of pain, marked hemorrhage, foul leucorrhoea, etc., it is very frequently too late.

In a small town, but a few miles from Temple, resides a widow who has five fatherless children. She was deprived of a noble husband and they of a much needed father, by reason of a little black mole, which he observed and cherished as a pet mark upon the calf of his leg for many years. After so long a time, when his powers of resistance began to fail, for he was past 40 years of age, the little black pet began to grow. Like most pets, it was thought to be harmless and was soothed with something; but it continued to grow, and after going through the usual routine of home remedies, he applied to a competent physician and was referred to a surgeon, who recognized it as a melanotic sarcoma, perhaps the most malignant of all cancerous diseases. It was then not larger than a pecan, but he was promptly advised of its fatal character, though such an opinion seemed almost unbelievable from such a small growth. Like the serpent of the mythological story, hatched from an egg carried in the warm bosom of a woman, into which it soon drove its poisonous fangs, destroying the very source of its existence, the little mole destroyed the life of that deluded man who carefully and unsuspectingly preserved the innocent looking parasite upon his leg for well nigh a decade. A commonly accepted truth is that an ounce of prevention is worth a pound of cure. In the case of cancer, an ounce of prevention is worth a ton of treatment, especially if the preventive measure is applied before the disease has spread to tissues beyond those in which it originated.

The temptation is very great to soothe people, especially those in whom we have a sympathetic interest, and many people dupe themselves with false notions regarding birthmarks, moles and other abnormalities. If there is ever a time in the life of an individual when he is entitled to receive the truth, the whole truth, the unvarnished truth, it is when he is afflicted with cancer or a disease predisposing to it. The time has long since passed when the medical profession should let its sympathy run away with its judgment, or cause it to keep the truth from the people under the lame excuses of wishing to avoid making them nervous or exciting undue alarm.

It would be placing an individual to a similar disadvantage to permit him to remain sleeping in a burning building, because the fire could not exactly be located, although the smoke gave ample evidence for suspicion and alarm.

Cancer is a real entity; it is not a state of imagination and cannot be influenced or cured by any state of mind, any more than a steadily burning building can be suppressed by the wishes of a host of idle onlookers. Neither can it be rubbed away by all the osteopaths in the world, any more than the wind and rain can be controlled by the noisy incantations of the wildest savages. Therefore, it is little less than criminal in this day of enlightenment, for one to profess to remove cancer or cure it by Christian Science or Osteopathy.

If a man had a large splinter of wood accidentally driven deeply through the palm of his hand, he might argue until he was black in the face that it didn't pain him, but he would not be so imbecile as to permit a Christian Science healer to pray it out, or give him the popular absent treatment, neither would he be deluded by the smooth talk of the osteopath about manipulation of the spinal vertebrae and nerves which spring from the spine and supply the hand. Any sane man would quickly pull it out himself, if he could, and if he could not would apply to a real physician or surgeon, who would not only remove the foreign body but would use his scientific knowledge regarding lockjaw, which so frequently follows such injuries, and administer anti-tetanic serum, which would certainly fortify the patient against that most fatal disease.

Cancer should be considered a foreign body, developed upon or within the animal organism and should be attacked quickly and heroically, and fought uncompromisingly, regardless of scarring or the loss of any limb or organ that may be spared without fatal consequences.

Everyone would know that cancer can be cured in its earliest stages and when upon the surface, without the dreaded knife, not by the old uncertain and deceptive cancer pastes, heralded by cancer specialists, but by the scientific application of the reliable thermocautery, followed by scientific application of the x-ray and perhaps radium. Cancer pastes, composed usually of such caustics as arsenous acid, chloride of zinc, caustic soda, etc., though extremely painful and very disfiguring, occasionally result in a cure of superficial cancer; but they are inefficient and unreliable because they penetrate only a short distance into the tissues, deceive greatly by causing the tough tisues beneath the skin to slough and come out in great strings, which are pointed to with much pride as "cancer

roots'' by cancer quacks, most of whom are too ignorant to know that such caustics will do the same thing when applied to any normal tissue.

Cancer pastes are also deceptive because by their destructive and sterilizing effects, they often bring about a healing process upon the surface, very gratifying and consoling to the patient, who is thus induced to be satisfied and wait while the disease is steadily growing into the deeper tissues and neighboring lymphatic glands.

The people should know that the so-called secret pastes of the cancer specialists are all composed of or are dependent for their action upon such caustics as above mentioned. They are remedies which were extensively used by the regular physicians and surgeons of the world centuries ago, and having been found inefficient and unreliable have been abandoned by progressive physicians everywhere.

Everyone should know that cancer in its beginning is not a systemic or blood disease but is purely local in character and that at that stage it can usually be removed completely without danger and that the greatest danger arises from delay in recognition and postponement of treatment.

OFF SYMPTOMS OF CANCER OF THE STOMACH.*

BY

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The object of this paper is not to offer anything new, but only to review the symptoms, or off symptoms of cancer of the stomach. I believe such a discussion will be as much appreciated by the internist as the surgeon, for we very well know the majority of surgical cases are first seen by the family physician, and his ability and diagnostic skill means a great deal to the patient. This fact should make us realize our responsibility, and think more of our patient's welfare. With all the classical symptoms present in a given case, the diagnosis is comparatively easy, but the off cases are the ones that concern us most from a diagnostic standpoint.

Osler, in his late work, quotes Welch in an analysis of 30,000 cases of cancer; he found the stomach involved in 21.4 per cent of the cases, this organ standing next to the uterus in order of frequency; his figures plainly show that cancer of the stomach, as well as of other organs, is on the increase.

Males are affected much more frequently than females, at a ratio of five to four.

Statistics, as well as my own experience, show cancer most prevalent between the ages of 40 and 60—about 58 per cent.

The disease predominates in the white race, the ratio in 150 cases, according to Osler, was 131 whites and 19 negroes.

In Osler's 150 cases, there was a history of cancer in the family of only 11; seemingly a larger percentage were of tuberculous heredity —about 38 per cent.

Previous history of chronic stomach trouble was rather conspicuously absent in these cases.

Alcohol is one of the chief causes of cancer, in either the periodical or constant drinker.

Trauma is rarely a cause of cancer.

The point of the greatest diversity of opinion as it relates to stomach cancer, is gastric ulcer. The physician is against ulcer of the stomach as a course of cancer, the surgeon in favor of it. Osler says that in four of his cases he was able to trace the cause to gastric ulcer. The Mayos claim that about 75 per cent of their cases are due to ulcer. I am disposed to favor the latter view, for I think the surgeon who operates before death is better able to make a pathological distinction than internist who formulates his ideas from post mortem examinations. The pylorus is the favorite location for cancer of the stomach. Osler's statistics show more than 50 per cent of the cases in this locality.

I think it appropriate at this point to take into consideration a few of the anatomic and physiologic facts relating to the stomach. Physiologically we know the stomach practically consists of two distinct parts—the cardiac portion, which is the food reservoir, in which salivary digestion continues, and the pyloric portion, which is the seat of active gastric digestion. Cannon affirms that there are no peristalic waves in the cardiac portion, but that as the food passes from the pylorus into the intestines, tonic contraction of the muscles of the fundus squeezes the contents of the pyloric portion. Moritz, Levan and Cannon, assert that muscular activity is chiefly manifested in the pyloric portion. In this portion during digestion there is a succession of peristaltic waves, which waves in the human being pass at the rate of three per minute. Cannon points out that the efficiency of peristalsis in mixing food depends upon the contraction of the pyloric sphincter. So long as the sphincter holds, each constriction ring, coursing from the middle to the end of the stomach, presses the food into a blind pouch; the food, unable to escape through the pyloric opening, has as its only outlet the opening in the advancing ring. This is an admirable device for bringing the food under the influence of the glandular secretions

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of the pyloric region, for, as a constriction occurs, the secretion surface, enclosed by the narrowed muscular ring, is pressed close around the food within the ring. As the constriction advances it continually presses inward fresh glandular surfaces; and, furthermore, a thin stream of food is continually forced back through the ring and past the mouths of the glands. The old view that the pyloric sphincter only opens after several hours continuance of the process of digestion, and that then the stomach empties at once, is incorrect. It is emptied in small amounts, which escape at frequent intervals because of the intermittent opening of the pylorus. When the pylorus is open a wave of peristalsis forces some of the material from the stomach into the duodenum. (Cannon.)

Cannon is of the opinion that the pyloric sphincter is caused to relax by the presence of free hydrochloric acid in the pyloric portion of the stomach. When the pylorus is open acid chyme passes into the duodenum, the acid causes a flow of alkaline pancreatic juice and is thereby neutralized. As the neutralizing proceeds, the stimulus closing the pylorus is weakened until the acid in the stomach again opens the sphincter.

The gastric glands are of three types, namely, the true gastric glands, the pyloric glands and the cardiac glands. The true gastric glands are the fundus glands and the peptic glands. They are distributed throughout the entire fundus and body, and may be found even at the pylorus. They are known as the chief or peptic, or the central cells of the glands. In this portion, also, is situated the acid cells secreting the acid of the gastric juice. The pyloric glands are placed plentifully about the pylorus, but between the fundus and pylorus in the region known as the transitional, intermediate zone, both true gastric and pyloric glands are found, and secreting both mucus and pepsin.

The cardiac glands are found about the oesophageal orifice and secrete mucus. The nerve supply is from the vagi and solar plexus of the sympathetic, uniting and forming the plexus of Auerbach and Meissner.

Symptoms in a well developed case are quite well defined, *viz,* gradual emaciation; loss of appetite; pain after eating, gradually increasing as disease progresses, until the patient abstains from taking food; vomiting, with or without blood; constipation, as a rule, but diarrhoea sometimes with or without blood; all symptoms increase, and when the tumor is palpable, the diagnosis is easily made. Test meal (Ewald) will show absence of hydrochloric acid and the presence of Oppler Boas bacilli, yeast fungi, sarcintici, etc.

In atypical varieties the symptoms are quite different in many respects. First, the location of the tumor; second, the entire absence of pain after eating; vomiting if at all, very late; emaciation marked, resembling a progressive anaemia; boat shaped abdomen; constipation always; very little if any belching; able to take food freely without pain, but has a disgust for it—just the opposite of the typical cases.

I wish to lay special stress upon the location of the tumor in cancer of the stomach. Upon investigation, I find less than 50 per cent have the tumor in the epigastric region, probably 25 per cent in the umbilical, 10 per cent in the left and even less than 10 per cent in the right hypochrondriac region. This was a little surprising to me in view of my conviction that the pyloric was the most frequent location for cancer.

In the past few years I have had occasion to notice the left sided tumor in three or four cases, well around in the left hypochondriac region, with no stomach symptoms whatever. Post mortem showed cancer of the pylorus and normally patent. In one of the cases, the tumor had quite a range of movement on inspiration, and also when the stomach was loaded.

Just recently I had occasion to do an exploratory laparotomy for diagnostic purposes. The mass lay well in the right hypochrondriac region, extending down in the right lumbar region; some movements in expiration and inspiration; pain was continuous—eating had very little if any influence upon it. I found the pylorus very much to the right of the median line—perhaps 3½ inches—and involved in a mass of cancerous tissue that proved, by microscopical examination, to be carcinomatous. Ewald test meal was given and the stomach aspirated one hour afterward. Hydrochloric acid was found to be very much lowered.

This case shows pylorus to be displaced as much to the right as my other cases was to the left. Now there is a reason for this condition, and I must draw upon your imagination for a moment. The gastroptosis primarily pulling upon the gastro-hepatic omentum with a lessened intra-abdominal pressure, can far overcome its antagonist on the opposite side, namely, the gastro-splenic omentum, causing the displacement to the right; and I suppose the position would be the cause at least to some extent, for the pyloric displacement to the left of the median line. Osler classes this type as "Latent Cancer."

The pulsation caused by the underlying abdominal aorta is often deceptive, requiring close watching to properly differentiate from other conditions.

Another very interesting point is the mobility often noticed, especially in tumors of the pylorus. In two of my cases the tumor was fixed; in one it could be made to go from left to right hypochondriac region easily, being sev-

eral inches from the normal position of the pylorus.

Pain, as in many other cancerous conditions, is absent until the disease is well advanced, unless it be one of the rapidly progressive types. I am glad to say that physicians are and have been learning to regard the absence of pain as of as much importance as severe pain, and are fast becoming acquainted with the fact that the word cancer does not necessarily mean pain.

Examination of the stomach contents is a valuable aid in diagnosis. An Ewald test breakfast, consisting of a slice of bread or toast, a cup of tea without milk or sugar, is given at 7:00 a. m., and withdrawn at 8:00 a. m., showing absence of hydrochloric acid, is a very valuable diagnostic sign, especially when the bacilli of cancer are present.

There are two diseases that could easily be mistaken for cancer of the stomach. First, pernicious or progressive anaemia; second, chronic gastric ulcer, with infiltration, adhesions, etc.

I wish to call attention to the frequent location of gastric cancer to the left of the median line, well in the left hypochondriac region, notwithstanding that we are taught by our anatomists that the pylorus is just to the right side of the median line in the epigastric region.

Light, easily digested diet, stomach lavage, etc., and surgery, is the treatment.

I am indeed glad to know that the medical profession has awakened to the stubborn fact, and are trying to educate the people who are depending upon them for protection of their homes and their families, and for the prolongation of life, peace and happiness, that the word cancer does not mean pain. We all know that cancer is primarily a local disease, just the same as appendicitis is local for a certain length of time, and that to remove this local manifestation early, means years to the life, satisfaction and happiness of our patient. *Cancer Does Not Mean Pain Literally.*

THEORIES AS TO ORIGIN OF JACKSON'S VEIL.—Against the theory of the inflammatory origin of these membranes, Lynch, (*U. S. Naval Med. Bulletin*) says, are the regularity of situation of the blood vessels, which usually run about a centimeter apart, and the serous surfaces moving one over the other with a fluid between. If due to inflammation, adhesions would take place between the two serous surfaces, as in pleurisy. His conclusions are: 1. The membrane described by Jackson is of embryonal origin, but it may be so altered by inflammation as to appear like an ordinary adhesion. 2. There are unquestionably adhesions of inflammatory origin, due to perityphlitis and pericolitis; these membranes should not be mistaken for those of Jackson, as there are many points of difference. 3. Kinking or malformations are due to improper fixation or rotation; and the length of the mesentery has a great deal to do with the kinking of the ileum.—(*Jour. A. M. A.*)

THE CAUTERY IN THE TREATMENT OF CANCER.*

BY

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TEMPLE, TEXAS.

The field of usefulness of the cautery in the treatment of cancer is almost as broad as the cancer question itself. We are all agreed that perhaps the greater number of cancer deaths are unnecessary and that proper service at the right time will reduce the appalling mortality by more than 50 per cent.

The cancer question as applied to the individual most naturally suggests consideration under the following heads: (1) Prevention; (2) Cure; (3) Relief. Of these three the greatest is prevention.

PREVENTION.

We know from experience that local irritation tends to produce, or at least to act as a localizing cause of cancer. Most of us can recall the smoker's blistered lip, the irritated and easy to bleed mole, the small lump in the breast, all of which were benign and not of sufficient importance to the patient to demand attention.

I am constrained to believe that the patient's failure to duly recognize the danger of local irritation or abnormal tissue growth, is largely chargeable to the medical profession. How often have we had the incurable cancer patient say to us: "My doctor examined this a long time ago and advised me to 'let it alone, and not to trouble it until it troubled me'." In the light of our present experience, we know that such advice is worse than dangerous; it is almost criminal.

The public has been getting such advice throughout many generations and perhaps is getting it even now, occasionally. It will require much time and patience to correct the damage from such advice; human lives are at stake and are being daily sacrificed, and it behooves our profession to buckle on its armor and enter the fray with the full knowledge that a united effort will be rewarded with the saving of many lives.

Dr. W. W. Keen many years ago undertook to impress us with the danger of temporizing with local irritations, moles and new growths. Some of his observations were given circulation through the lay press; some of the seed took root, and the attention of the public was, to a small degree, directed to these "had it all my life conditions" that are so frequently the forerunnners of disaster.

Dr. Bloodgood of Baltimore, who is rendering

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*Read before the Joint Meeting of Scientific Sections, State Medical Association of Texas, Fort Worth, May 5, 1915.—Contributed by the Section on Surgery.

such notable service to humanity, says that during 1913, there were about 75,000 deaths in the United States from cancer and that this mortality is chiefly due to ignorance, to fear of operation which leads to delay, or to bad treatment. He says that cancer never develops in healthy tissue, and it is safe to add that a

Fig. 1. Epithelioma of the face with accompanying scaly patches.

mole, wart or nodule is never healthy; such growths present an ever constant invitation for the development of cancer.

We have all observed the peculiar skin; the small vessels are usually visible, and the patient burns easily from sun rays and blisters from the winds. He begins to develop rough and scaly patches that build up like little "toad stools," that frequently peel off leaving the surface smooth and glistening, soon to be covered again with another crust formation. This process may repeat itself for years and finally the patient develops a small ulcer that does not heal, to be followed later by a definite cancer. The dermatologists class these conditions as Seborrheic Karatoses[1], and we have been taught to remove the crust with benzine and to apply an ointment, perhaps of salicylic acid.

The condition is of grave importance, and demands far more radical treatment. A certain type of the disease presages the development of prickle cell carcinoma. We are not able to always clinically differentiate the dangerous type from the benign. It, therefore, behooves us to treat all cases as dangerous. From the standpoint of safety, we hold that these patches are distinctly precancerous and that the infection (if infection it be) should always be destroyed. At a former session of this section I used the term "precancerous." At that time I was almost disposed to admit that the expression was unscientific, but necessary. Today I have no apology to make, as I observe the term is generally used by American surgeons. The expression conveys to the public mind information as to the possible approach of danger that could not be so tersely and impressively conveyed by any other expression. If the general practitioner would adopt the term with his patrons when discussing moles, warts, indolent ulcers, scaly patches on the face, any new tissue growth or any source of constant irritation, a great step would be taken in the direction of lessening cancer mortality.

For the past several years it has been our custom to treat these seborrheic patches with a *cautery bath.* If the patches be large and numerous a general anesthetic may be desirable, but usually a local anesthetic insures comfort. When a local anesthetic is used, we are careful to thoroughly prepare the skin with iodine and to introduce the needle well away from the crust, to avoid the possible danger of introducing infection into the deeper structures. The diseased areas are then gently but thoroughly *brushed* and *scorched* with a cautery. Such treatment produces no scar, the tissues are not cauterized to the extent of producing granulation and after sufficient treatment these scaly, dangerous patches are made smooth and safe; and when the infection is diffuse, the personal appearance of the patient is greatly improved.

In our experience, we are unable to recall a case of epithelioma of the face in which we have not found other scaly patches, or other abnormalities, and in well taken histories, we

Fig. 2. Scorching scaly patches on the face after removing epithelioma by cautery.

practically always get the information that there has for a long time been a rough or scaly patch where the cancer first appeared.

In Bloodgood's analysis of 820 cases of cancer of the skin and exposed mucus membrane, he was unable to find a single case which show-

1. Sutton, R. L.: *Jour. A. M. A.*, January 30, 1915.

ed the absence of a previous defect which might be regarded as a precancerous lesion.

For the past five years the cautery has been in general use in our work for the removal of most precancerous growths originating in the skin. When the mass removed is of sufficient size to allow it, a skin graft is planted as soon as the granulations will permit. We feel that the grafting is particularly desirable as it gives us a more rapid healing, a better cosmetic result and a tissue perhaps more secure from the standpoint of future cancer invasion.

In the light of our present "want of knowledge" as to the etiology of cancer and the fact that there is no way of determining when a growth ceases to be precancerous and becomes cancerous, it is our duty to remove the growth by such means as will offer the least opportunity for transplantation or infection. From our experience and observation, we feel that the cautery is usually the safer method of procedure for all such superficial growth.

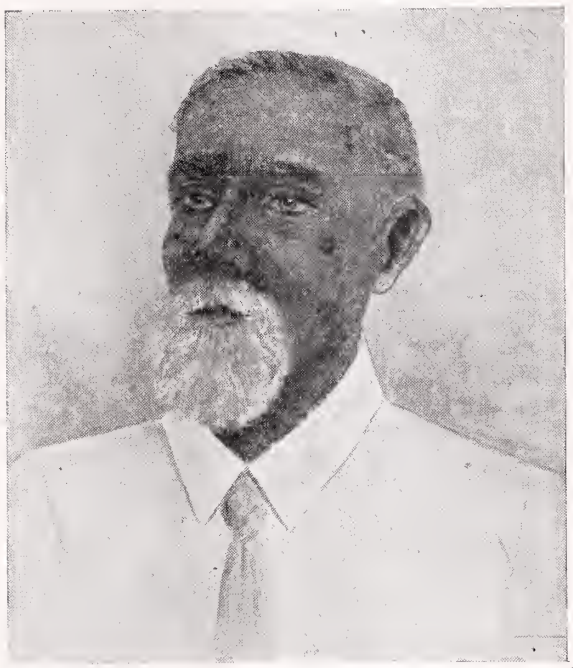

Fig. 3. Scaly patches on the face, after scorching with cautery.

THE CURE OF CANCER.

Dr. Bloodgood has aptly said, "Fear the beginning and not the end of cancer." This fear will induce patients to seek advice and treatment in that early stage in which the chances of a cure are best, even up to 100 per cent. Such advice from such an authority should further inspire us to early action. It is delay and not cancer that gives us our appalling mortality. Practically all cancers, at the right time and with the right service, are possible of cure. We are all agreed that in the beginning cancer is a local process and that if properly removed while in this local stage, is curable.

We realize that its extension is as stealthy and uncertain as are the movements of the thief in the night. By such action it does not rob us and our families of that which can be replaced, but imposes on us a sealed fate, months of such agonizing, suffering and dispair that death becomes a pleasure and relief.

Who is responsible? Allow me to quote briefly from a masterful address of Dr. Rodman, in which he reviews the report and conclusions of the Cancer Commission of Pennsylvania: "This work was undertaken to show, if possible, just where the greatest responsibility lies. It is, of course, to be proportioned to the medical profession on the one hand and to the general public on the other. There is the greatest possible room for improvement in both, but of the two it would seem that the medical profession should show a marked improvement first. We cannot view with complacency the fact that, as a general average, cancer patients have been under the care of their family physician more than a year before they applied for a radical cure." A further analysis of this report shows that only 68 per cent of the superficial and 48 per cent of the deep seated carcinomata were considered as operable when first seen by a surgeon. The superficial lesions had been apparent 18 months before a surgeon was consulted and in the deep growths well marked symptoms of the disease had been present 14 months. In superficial growths 13 months elapsed between the time the family physician was first consulted and the date of operation. In 3 per cent of the cases of cancer of the breast the physician first consulted failed to make a local examination and in 13 per cent he advised local applications or "waiting to see what develops." In cancer of the cervix no local examination was made in 10 per cent of the cases and bad advice was given in 20 per cent. The inoperable or hopelessly incurable cancer cases in Texas indicate that our profession is, to say the least of it, as negligent of its duty as is that of Pennsylvania.

With the knowledge that *cancer can be cured,* an enormous responsibility is imposed upon us. This responsibility can not be lightly assumed or avoided. When we are consulted by a patient who presents any subjective or objective symptom of a cancerous or precancerous condition, we should advise her of the danger and insist on a careful examination. If this be declined by the patient, it would be proper for us to refuse our advice. The physician should *demand* of the patient the necessity of a careful examination. The patient should *demand* of the physician her right to a careful examination. Until such plans of procedure

are adopted by the profession and the patient, the cure of cancer will not occupy much space in our discussions and literature.

In the treatment of cancer as in the treatment of precancerous conditions, we prefer, where practical, the removal of the cancer mass with the cautery, to be followed with skin grafting. In view of our present uncertain etiological knowledge of cancer and all the means of its

Fig. 4. Epithelioma of the cheek surrounded by cautery incision through healthy skin.

dissemination, we are particularly afraid of the opening up of any new surfaces for possible infection or transplantation adjacent to the primary focus. External cancers, with few exceptions, can be more safely and more widely removed with the cautery than with the knife. The annoyance from hemorrhage is practically eliminated, as is the possible danger of a local septic infection. The cosmetic result is equally as good, and we are never prevented from making a wide removal for fear of not having tissue sufficient to close the wound. It is perhaps true that now and then a competent surgeon may be influenced to do an unsafe operation on a small cancer for fear he may not be able to satisfactorily close the wound. With the cautery, such influences are not factors. It is desirable that tissue be removed in such manner as to furnish the pathologist with specimens for study. This, however, is not so imperative as is the wide removal or the wide destruction of the carcinomatous area. This, however, is easily accomplished, as is shown in the accompanying drawing.

It is not within the time limit or scope of this paper to undertake a discussion of gland dissection and the clearing out of dangerous spaces. However, permit me to say that such effort is as imperatively necessary in connection with the cautery as with the knife.

Dr. J. F. Percy of Galesburg, Ill., has done much to popularize the use of the cautery in the treatment of uterine carcinoma. He has devised several ingenious instruments for the protection and comfort of the patient, and has given us much information as to the effect and application of heat in these conditions. His compilation of the results in investigations as to the effect of heat on malignant tissue cells, is quite interesting and instructive. The average of these investigations indicates that carcinoma cells are destroyed when subjected to a heat of 124° F. for an average of twenty to thirty minutes, and that sarcoma cells are destroyed at about 115° F. He has also shown through experiments, by thrusting cautery points into beef muscle, that low heat produces a much wider area of coagulation than is obtained by a cherry red or greater heat, which will produce a charcoal core.

Two years ago, Dr. Terrill made some investigations for us by cutting carcinomatous masses with a paquiline cautery and subjecting the tissue to miscroscopic study. He found that the coagulation and carcinoma cell destruction to the degree of being unrecognizable extended one-fourth to one-third inch beyond the cautery incision. Had these cautery incisions been made with a lower degree of heat, according to

Fig. 5. Epithelioma of cheek lifted out by forceps while the cautery separates it from the malar bone.

Percy's experiments, the area of sterilization would have been proportionately widened. At any rate, the evidence seems to be conclusive that in addition to the tissue removed we render safe through the destructive effect of the heat an additional margin of tissue of at least one-

fourth inch. With the use of the knife, no tissue is rendered safe except that removed.

I beg to quote the following from a recent personal communication from Dr. Percy:

"My technic of applying heat in inoperable carcinoma of the uterus seems to be interesting the surgeons everywhere. I hope soon to publish a paper on my technic, and in that I emphasize three things: First, a low degree of heat. It is not above 160° to 200° F. The heating iron is passed clear to the fundus of the uterus. If necessary, I use my cautery knife to cut a way through to get to the fundus. If I have carbonized the tissues, I curette this out with a sharp curette. Second, I maintain the heating iron in one place until the tissues that can be influenced by the heat are thoroughly hot. In other words, the heating iron must not be moved about until the parts to which it is first applied is so hot that it cannot be held comfortably in the surgeon's hands, incased in a No. 2 rubber glove. Third, the heat must be applied until the tissues involved in the malig-

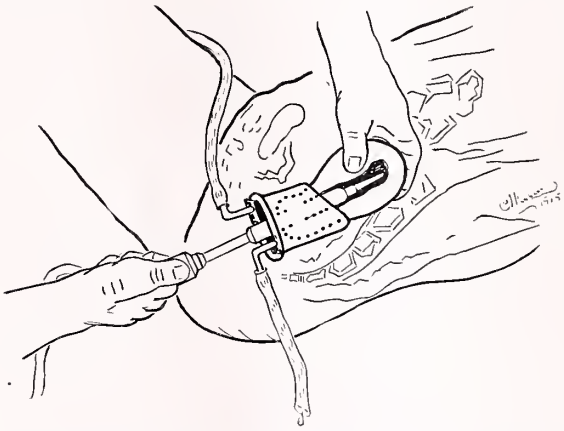

Fig. 6. Cauterizing the uterus through Percy's cooling speculum, guided within the abdomen by the hand of an assistant.

nant process are absolutely movable, as they are normally. If this is not done, the treatment will fail."

In our own work we have been accustomed to applying the heat thoroughly and when hopefully justified, to remove the uterus, doing practically all cutting with the cautery. This method has decided advantage over the scalpel and scissor. Practically all carcinomatous cells are destroyed *in situ* and no new fields are opened for infection.

RELIEF.

However much we would like to forget the incurable cancer case and particularly those of uterine origin, they are forever with us and must be considered. We are due these unfortunate women our service and it should be rendered, but in the rendering we should not forget that we are under a greater obligation to humanity at large. It should be clearly understood and so stated to all available friends and relatives, that the operation is not undertaken with the expectation of effecting a cure; that the patient has passed beyond the favorable stage for operation, and that the service is rendered with the hope of lessening the agony and of prolonging life. It is quite probable that operations on the hopelessly incurable have been, and are, potent factors in deterring those in a curable condition from availing themselves of the early opportunity of surgical relief. Unless the service to these unfortunates is properly safeguarded it will work to the detriment of others. How often does it happen in these cases that the relatives and friends refer to the death as a surgical aftermath and not as a death from cancer? Here again, in this condition, the cautery plays an important role, not as a cure all but as a relief. Proper cauterization will lessen hemorrhage, remove the odor, relieve pain and prolong life. We do not believe it to be an Utopian dream to hope that now and then one of these otherwise inoperable cases may be cured. We have two such cases enjoying a comfortable life after two years. This duty of service is one that we can not forego, and in its rendering we realize that we are inviting criticism of our vocation that may cause some other individual to endure the agony of a cancer death. So long as we render surgical service to these, all but hopeless cases, without giving full advice as to the hopelessness of cure, so long will we be called upon to render such service.

CANCER OF THE COLON.*

BY

J. S. McCELVEY, M. D.,

TEMPLE, TEXAS.

Ancient surgery may be said to have ended in 1878, when Sir Joseph Lister of London, announced his theory of antiseptic treatment of wounds. During that period, but little development was made and that was principally along the lines of emergency surgery or surgery brought about mostly by injuries. Of abdominal diseases and abdominal diagnosis, they were almost completely in the dark and he who dared to go in to see, could well have said, "Abandon hope all ye who enter here."

The present day surgical science commenced where the above left off and it too is fast drawing to a close. I predict that in future generations this will be regarded as the period in which the greatest discoveries and improve-

*Read before a General Meeting and Joint Session of Scientific Sections, State Medical Association of Texas, Fort Worth, May 5, 1915.—Contributed by the Section on Surgery.

ments have been made. We know the causes, we know the early and proper diagnosis, we know how to operate safely and this brings us down to the surgical knowledge of today.

Our attention now and in the near future will be centered upon how to cure our patients from their standpoint and not solely from an anatomical and pathological point of view. We can no longer represent that such a disease exists in an individual and the operation therefor is safe, but we must go further and give assurance that the operation is not only safe, but will cure the patient from his standpoint, relieving him of his aches and pains and not impairing his vitality or usefulness in life in any manner. I predict, also, that the time is not far distant when the technique of each operation for each disease will be standardized, as well as the safest time for its performance. This will be accomplished by the hospitals keeping careful and complete records of all operations for diseases and the different stages of the diseases at which they are performed, and then following up the end results. A careful comparison of these statistics will be made, and the best technique, the best operation and the best time to operate will then be determined and we will have almost reached the goal.

In spite of our boasted progress, and knowledge of surgical affections there remains yet to be mastered that prevalent and loathesome disease cancer. As to its cause or cure when once disseminated throughout the system, we know no more than those in the darkest of ages; but along certain lines we have made some advancement. We are aware of the precancerous conditions and if we remove them, we prevent the development of the disease. We have learned how to diagnose it early while still in the local stage, and how to operate upon it radically and thoroughly and thereby produce a cure before the disease becomes general.

Cancer of the colon offers a better prognosis than cancer of any other part of the alimentary tract, and this is rather singular, as it is usually the hardest to diagnose and the latest to be operated upon. But, on the other hand, it remains localized longer and in over one-half of the cases disseminates by metastasis through the blood vessels rather than through the lymphatics. The lymphatics may enlarge early but they are more often inflammatory and not malignant. The colon is the sewage pipe and sewage container of the human body, and harbors many bacteria and much obnoxious material. Consequently, nature has supplied it sparsely with lymphatics; otherwise we would be suffering with bacteraemia and other poisons. Most cases of cancer of the colon die from obstruction or other causes, before metastasis or dissemination results.

Cancer of the colon arises largely between the ages of 40 to 65 years, but occurs in the young more frequently than cancer in any other part of the body, and when it does occur metastasis takes place earlier and the disease runs a more rapid and fatal course. Cancer is more frequent in the colon than in any other part of the intestinal canal. The greatest number are found in the sigmoid, probably because that is the fecal container and is subject to more constant irritation and injury. The next most frequent site is the cecum, which receives the liquid or semi-liquid contents of the small intestines, teeming with bacteria.

The ascending, transverse and descending portions are mostly pipes which conduct the refuse from the small intestines or cecum, to the main sewage, namely, the sigmoid, consequently they do not hold the contents long and are not so liable to constant irritation; therefore cancer is less frequent.

The symptoms of cancer of the colon are very obscure in the beginning and are those produced by narrowing or stricture of the lumen. The patient complains of an uneasy, tight feeling at the disease point, and regularly, several hours after each meal, gas pains develop, which terminate at the affected spot; the gas seems to roll to the same point each time and cannot pass. There is generally a slight tenderness on deep pressure over this area, but a tumor or induration can rarely be palpated on account of the ever present tympany. Constipation develops, which at first is slight, but gradually becomes more and more marked until nothing but liquids can pass. After purgation, diarrhea alternates with constipation. The abdomen becomes distended from the inability of the gas to pass. The patient develops symptoms of auto-intoxication on account of the retained fecal matter. The tongue becomes coated, the breath foul, the complexion muddy and a general feeling of malaise results. As the disease advances the pains become more severe after meals, until the patient is afraid to eat; we then have the symptoms of starvation added. The patient rapidly declines in weight and vitality, due to the intoxication and starvation rather than to the cancerous cachexia. Finally, complete obstruction results and then there is much distention, a profound toxaemia and constant pain, most marked at the diseased point and rendered more severe by taking anything into the stomach. Vomiting occurs, but is not a pronounced symptom and comes on late or after ingestion of food or drink. These are the symptoms of developing obstruction and not of the disease, and we do not recognize it as cancer until the abdomen is opened.

There is another type, the fulminating kind, found principally in the young. It involves the mucous membrane and produces early ulceration and sloughing. The patient then has a

bloody, purulent diarrhea, much colicy pain, localized peritonitis and general cachexia. The diseases disseminates early and rapidly proves fatal, before it can be recognized or curative measures adopted.

In the majority type the patient, at the age of 40 to 65 years, comes complaining of an uneasy constricting feeling at the seat of trouble and of gas pains worse several hours after ingestion of food. There is tenderness on pressure over the diseased area tympany over the entire abdomen, and obstinate constipation. On top of these, symptoms of auto-intoxication and chronic obstruction of the bowels supervene. *X*-ray examination of the colon is a valuable aid in early diagnosis. In suspicious cases exploratory operation should be more frequently resorted to. In the fulminating variety the symptoms are those of ulcerative diarrhea and localized peritonitis and usually cannot be recognized until too late for radical cure.

The pathology of this type begins in the columnar cells of the glands of the gut, spreading respectively to the mucosa, submucosa and muscular coats, and finally to the peritoneum. The peritoneum, however, is attacked very late, the patient usually dying of starvation and obstruction beforehand; but when once it does become involved, the dissemination is rapid unless enveloped by the omentum, as in a case I had which has remained well for over four years.

The lymphatics are also affected late or not at all and if at operation they are enlarged it does not necessarily mean that they are cancerous. The disease attacks the circular muscular fibres more than the longitudinal and produces a constriction of the lumen, like a small band drawn around the gut. The band contracts more and more until complete occlusion results. The distal end of the bowel is empty and collapsed. The proximal end is dilated, its muscular coats hypertrophied, the entire wall oedematous and its lumen filled with gas and decomposing material teeming with bacteria.

The other variety, found mostly in the young takes on a fungus growth within the lumen. This growth rapidly breaks down forming ulcers which quickly invade all the coats and lymphatics and spreads early throughout the system. This form is characterized by rapid development, profound cachexia and death, usually before a proper diagnosis can be made or cure be had.

The prognosis in the usual type, if diagnosed and removed early and thoroughly, is better than for any other part of the alimentary tract. A man of cancerous age, complaining of a constant stricture-like feeling in the bowel, always located at the same spot, and of obstinate constipation, should be subjected to an exploratory laparotomy if a diagnosis cannot otherwise be made. If such procedure should be adopted in all cases, the end results in cases of cancer of the colon would be most excellent. The operative mortality in the late cases is high, especially if the resection be done at one sitting, which is always ideal. The patient is starved, deeply toxic and the walls of the proximal end of the gut are dilated, oedematous and in poor condition for union after resection. The operative death rate has been improved decidedly by doing the operation in three stages. At first a fecal fistula is established and after the patient has sufficiently improved, the diseased bowel is removed; the fistula is closed when necessary. The operation *per se* is not so dangerous, but it is the extreme condition of the patient and the condition of the diseased part that renders it hazardous. It we diagnose and operate early enough, the death rate is not greater than for other abdominal operations of like magnitude.

The ideal and proper treatment is early diagnosis and early and radical one stage operation. Unfortunately, in the majority of cases, even where permanent cure is possible, we are confronted with the necessity of operating in the presence of obstruction and have to decide whether to do the work all in one stage or in three stages. My personal opinion is that if vitality is not too low and the proximal end of the gut is not too badly damaged, it is better to do the complete operation at once; otherwise operate in three stages.

If the case is incurable and the relief of obstruction is the only thing we have to look after, I think resection in selected cases is still indicated. In other cases shortcircuiting around the disease is better and in still others a permanent fecal fistula must be established. If we can give temporary relief by resecting or shortcircuiting and closing the wound up to heal by primary union, I think it preferable to a fecal fistula, even though the patient may not live so long. Having a complete operation, even as a palliative measure, adds much comfort and lends new hope, which psychological factor may bring many days of happiness to the condemned victim. On the other hand, a fecal fistula renders one unpleasant to himself and those around him, and is a constant reminder that the sentence of death rests upon his brow and he has only a short time in which to live. The physical pain has been alleviated, but the mental anguish substituted therefor is often worse.

I shall not go into the finer points of the technique of the operations, but there are some anatomical features in each section of the colon necessary to be considered. The cecum is partly supplied by the same artery and lymphatics, *i. e.*, ileo-colic, as the lower six inches of the ileum and partly supplied by the same artery and lymphatics, *i. e.*, colica dextra, as the ascending and hepatic flexure; therefore, in order

to remove all the disease with the gland, it is essential that we remove the lower six inches of ileum, cecum, transverse and hepatic flexure up to the middle colic artery when anyone of these parts are involved. The vessels and glands lie in the inner leaf of the mesentery and by cutting the outer one, the whole cecum ascending colon and ileum, together with their blood vessels and lymphatics, can be brought out of the wound and removed *en masse*. It is immaterial here whether we do an end to lateral or lateral to lateral anastomosis, nor does it matter whether it be anti or iso-peristalsis.

In resection of the transverse colon we must bear in mind that the greater part of the colon is supplied by the middle colic vessels and lymphatics and matter are facilitated by ligating these vessels, cutting the lower leaf of the mesentery and peeling up the lymphatics first. The transverse colon is completely enveloped by the peritoneum, hence we can do either and end to end or lateral anastomosis. If the latter is preferred it must be iso-peristalsis.

There is nothing special about resection of the descending colon and the iliac portion of the sigmoid except they too can be rendered more movable by dividing the outer leaflet of the mesentery and they have no mesentery posteriorly, hence a lateral iso-perisaltic anastomosis must be selected.

The pelvic sigmoid, where most of the cancers are found, is completely invested by peritoneum and can be rendered movable and brought up into the wound by dividing the outer peritoneum and the peritoneum surrounding the gut in the pelvis. Here the operation of choice is anastomosing the lower end to the upper end of the rectum. Belfore has a very simple method, which has converted a difficult operation into a simple one. After the diseased part has been removed, insert a colon tube through the rectum about an inch into the colon and fasten it there with a catgut suture. By pulling on the tube the cut end of the sigmoid is brought in apposition to the cut end of the rectum, where they may easily be united over the tube. This method I have tried in two cases with much satisfaction.

The after treatment of the resection cases requires only a few words. The patient should be kept in the Fowler position in bed to favor drainage, an hypodermoclysis should be given for supportive and eliminative measures. If vomiting is troublesome, the stomach tube should be used freely. The bowels should be opened early and feeding resorted to as soon as expedient.

Papine Battle and Co.—This is a simple aqueous alcoholic solution of morphine, 1 grain to each ounce. It is exploited under the utterly unwarranted claim that it does not nauseate, constipate nor create a habit. (*Jour. A. M. A.*, October 17, 1914).

SOME RATHER UNUSUAL CARCINOMATOUS GROWTHS.*

BY

HENRY HARTMANN, M. D.,

TEMPLE, TEXAS.

The object of this paper is to present carcinomatous conditions met with by us rather recently which we have regarded as unusual. The first of these is that of carcinoma of the distal portion of the appendix. We find in consulting the literature that the last few years have afforded a number of examples of carcinoma of the distal portion of the appendix. The form, we are told, is usually of the simplex or scirrhous type, and what is very remarkable is that with scarcely an exception the presence of the tumor has been a chance discovery, there being no symptoms; and what is more, little infiltration and no metastases. The tumors in general have been small and well defined. We have here, then, as one of our most prominent pathologists has expressed it, "the paradox of a benign carcinoma." This same writer points out as worthy of note that the rare carcinomas of the lower end of the ileum are of the same benign type. We find further, that it is taught by others that these tumors of the lower end of the ileum and more often of the distal portion of the appendix, are apparently related to intestinal tumors classed as polyps and regarded as benign structures. They have all the appearance of a carcinoma, both in structure and in the way they are disposed in the muscle and other coats. Those in the appendix are said to occur more frequently in young people and children and are found at operation for appendicitis. Again, it is pointed out that these tumors show no evidence of active growth and do not give rise to metastases, although malignant tumors may arise from them. Lastly, we find that, according to one of the investigators, these tumors are probably best regarded as congenital anomalies, analagous to the vascular and pigmented nevi of the skin.

The case of carcinoma of the distal portion of the appendix sent to us for microscopic study, from the gynecological clinic, corresponds in almost every particular to a large majority of the cases reported. It occurred in a patient 22 or 23 years of age, and was discovered during an operation undertaken to correct some condition of the pelvic organs. There had been no definite symptoms of appendicitis; in fact, as we now remember the clinical history, there were no symptoms pointing to an appendical involvement. In the gross appearance of the

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*Read before the General Meeting and Joint Session of Scientific Sections, State Medical Association of Texas, Fort Worth, May 5, 1915.—Contributed by the Section on Pathology.

appendix there was little to suggest a malignant condition. The enlarged distal end, which measured 2 cm. in length and 1.5 cm. in thickness, might very easily have been thought of as being due to the presence of a fecal concretion.

It is to be said, however, that a more careful examination suggested to the operator the possibility of malignancy. There were no adhesions to surrounding structures, and the serous surface presented nothing unusual. On section, the enlarged portion of the appendix appeared as a uniform, yellowish tissue, which, under the microscope, represented the simplex type of carcinoma, showing considerable degeneration, and involved all but the serous coat. No trace of mucosa could be distinguished.

The operation in the case referred to above was performed about three months ago. There has been no evidence of a recurrence of the carcinomatous condition.

The second case we have thought of as presenting a somewhat unusual carcinomatous growth, was that of a so-called "colloid" cancer of the rectum, or of both upper part of rectum and lower end of sigmoid colon. It is true, of course, that colloid formation is of frequent occurrence in carcinomata of the intestinal tract; it is the extent of the colloid formation which has caused us to regard the case in question somewhat an unusual one.

A more or less extensive mucoid change, "colloid" degeneration, occurs in carcinomas of the digestive tract, particularly in the rectum. The tumor cells seem to retain the power of producing mucin, but are apparently unable to excrete it, so that it becomes heaped up in the cells, distending and eventually killing them. It is pointed out that whole alveoli may suffer from this change, so that careful search is necessary to discover cells to give a clue to the nature of the tumor.

We can probably best present the case of "colloid" cancer that came under our observation by copying from the autopsy protocol, as follows:

K. J., age 26 years. Body of well developed negro, somewhat emaciated. A large tumor mass can be palpated through the abdominal wall in the left iliac region.

Abdomen: A large mass, the anterior surface of which is nodular and of a greenish-yellowish-white color, is seen to occupy the left pelvis and to extend for a considerable distance up into the left abdomen. Upon removing the growth by severing numerous adhesions to surrounding structures, it is found to measure 18 cm in length and about 10 cm in thickness. The prostate gland is included in the mass, and, with the exception of a small, irregular area of tissue, it has the same general appearance of the tumor. The wall of the bladder is firmly attached to the new growth, but the mucosa does not appear to be infiltrated. An incision through the anterior wall of the rectum and sigmoid shows a complete destruction and absence of the mucous coat for a distance of at least 10 cm. At this situation, involving the entire lumen of the gut for a distance, as mentioned, of 10 cm, tbere is an excavated surface, the lumen of the gut being larger because of the extensive destruction of its inner wall. The wall of the gut is infiltrated by the tumor which completely surrounds it to the extent of about 18 cm. There is seen an extensive infiltration of the great omentum, the parietal and visceral peritoneum, the upper surface of the liver and under surface of the diaphragm. All these surfaces are studded with nodules varying in size from the very small to some several cm in diameter. No evidence of a similar growth is found above the diaphragm.

In the microscopic study of various sections from the original growth, as well as from a number of the nodules scattered throughout the abdominal cavity, it was necessary to make a careful search to find cells to give a clue to the nature of the tumor. It was only after studying a number of sections that areas were found in which some of the cells had not been completely disorganized and replaced by collodial material.

A Convenient Conscience.—John A. Patten, one of the most prominent laymen in the Methodist Episcopal Church organization, has that peculiar type of conscience possessed by some erstwhile church members that can be twisted in such a way as to permit him to engage in many shady transactions, ostensibly without a knowledge of doing wrong. The Council on Pharmacy and Chemistry has, however, furnished evidence to the effect that the nostrum known as "Wine of Cardui," made and sold by the Chattanooga Medicine Company, of which John A. Patten is a large owner, is nothing more or less than a patent medicine which is taken largely for its alcoholic effect. Inasmuch as not one of the publications of the Methodist Episcopal Church will carry advertisements of "Wine of Cardui," because the business is too dirty, too vicious and too fraudulent for their pages, the query is offered by the *Journal of the American Medical Association*, "Why does that church bestow on a man who makes his money through such a business some of its highest honors and dignities?" (*The Journal of the Indiana State Medical Association.*)

MISCELLANEOUS.

ARTICLES OF FAITH CONCERNING CANCER.*

A PLATFORM UPON WHICH TO UNITE IN THE CAMPAIGN OF EDUCATION.

(1) That the hereditary and congenital acquirement of cancer are subjects which require much more study before any definite conclusions can be formed concerning them, and that, in the light of our present knowledge, they hold no special element of alarm.

(2) That the contagiousness or infectiousness of cancer is far from proved, the evidence to support this theory being so incomplete and inconclusive that the public need have no concern regarding it.

(3) That the communication of cancer from man to man is so rare, if it really occurs at all, that it may be practically disregarded.

(4) That those members of the public in charge of or in contact with sufferers from cancer with external manifestations, or discharges of any kind, need at most take the same precautionary measures as would be adopted in the care of any ulcer or open septic wound.

(5) That in the care of patients with cancer there is much less danger to the attendant from any possible acquirement of cancer than there is of septic infection, or blood poisoning from pus organisms.

(6) That in cancer, as in all other disease, attention to diet, exercise and proper hygienic surroundings is of distinct value.

(7) That, notwithstanding the possibility of underlying general factors, cancer may, for all practical purposes, be at present regarded as local in its beginning.

(8) That, when accessible, it may, in its incipiency, be removed so perfectly by radical operation that the chances are overwhelmingly in favor of its non-recurrence.

(9) That, when once it has advanced beyond the stage of cure, suffering in many cases may be palliated and life prolonged by surgical and other means.

(10) That while other methods of treatment may, in some cases, offer hope for the cancer victim, the evidence is conclusive that surgery, for operable cases, affords the surest means of cure.

(11) That among the many advances in and additions to cancer treatment, the improvements in and extensions of surgical procedure surpass those in any other line, and fully maintain the pre-eminent position of surgical palliation and cure.

(12) That there is strong reason to believe that the individual risk of cancer can be diminished by the eradication, where such exist, of certain conditions which have come to be regarded as predisposing factors in its production.

(13) That some occupations, notably working in pitch, tar, paraffin, analin or soot, and with *x*-rays, if not safeguarded, are conducive to the production of cancer, presumably on account of the chronic irritation or inflammation caused.

(14) That prominent among these predisposing factors, for which one should be on guard, are: General lowered nutrition; chronic irritation and inflammation; repeated acute trauma; cicatricial tissue, such as lupus and other scars, and burns; benign tumors—warts, moles, nevi (birth-marks,) etc.; also that changes occurring in the character of such tumors and tissues, as well as the occurrence of any abnormal discharge from any part of body, especially if blood-stained, are to be regarded as suspicious.

(15) That while there is some evidence that cancer is increasing, such evidence does not justify any present alarm.

(16) That suggestions are put forward from time to time regarding eugenic, dietetic and other means of limiting cancer, should not be accepted by the public until definitely endorsed by the consensus of expert opinion. Such consensus does not exist today.

(17) That so far as we know there is nothing in the origin of cancer that calls for a feeling of shame or the necessity of concealment.

(18) That it will be promotive of good results if members of the public who are anxious about their health and those who wish to preserve it will, on the one hand, avoid assuming themselves to be sufferers from one or another dreadful disease, but, on the other hand, will submit themselves periodically to the family physician for a general overhauling.

(19) That at all times and under all conditions there is much to be hoped for and nothing to be feared from living a normal and moderate life.

(20) That the finding of any abnormal condition about the body should be taken as an indication for competent professional and not personal attention.

(21) That watchwords for the public until "the day dawns" and the cancer problem is solved, are: Alertness without apprehension, hope without neglect, early and efficient examination where there is doubt, early and efficient treatment when the doubt has been determined.

WARNINGS.

The following notices have appeared in recent numbers of the *Journal of the American Medical Association*, and are given for what they are worth. Swindlers work in wide circles and vary their methods considerably. The A. M. A. organizers at present in Texas, have credentials from the State Secretary.

"There is continually coming to this office," says *The Journal*, "evidence of the fact that doctors are still allowing themselves to be swindled by unauthorized solicitors under various representations. Evidence has been received that at least ten physicians have been victimized by these persons during the last six weeks. One active worker calling himself E. B. Huntington carries blanks bearing the name of the National Educational Association, 130 Nassau Street, New York City. As we have intimated before, there is no such association at that address. Two checks bearing the endorsement of this individual have been received this week. In one Huntington inserted his own name, making the check payable to him 'or to the American Medical Association'—a pure case of forgery; in the other case the doctor apparently was inveigled into making the check payable to Huntington direct. In the latter case the doctor wrote 'for the American Medical Association,' evidently supposing that this would protect him. Huntington is not the only man who is traveling over the country working doctors and others. May we suggest that those who would avoid being swindled should not pay money to traveling men whom they do not personally know. Checks should not be made payable to any person, but to the concern the person claims to represent; and even then one should be very sure that there actually is such a concern. Money should not be paid to

*During the four-day Cancer Educational Campaign, held under the auspices of the Vermont State Medical Society, June 8-11, 1915, Dr. William Seaman Bainbridge of New York City, presented the accompanying twenty-one "Articles of Faith" at several sessions. They form the conclusion of a paper entitled *THE CANCER PATIENT'S DILEMMA.* A plea for the standardization of What the Public Should be Taught in the Campaign of Education Concerning Cancer, which Dr. Bainbridge read at one of the sessions, and which appears in full in the Cancer Number of the *New York Medical Journal*, July 3, 1915.

anyone claiming to represent the American Medical Association unless he carries credentials bearing the signature of the Editor and General Manager and the seal of the Association."

Dr. Solren W. Staads of Sioux City, Iowa, states that on October 13, 1914, Fred Hernbloom, then agent for the American Accident Insurance Company of Lincoln, Nebraska, sold him two policies in this company for which he gave an official receipt. The company claims that Hernbloom has turned in neither the applications for the policies nor the premiums thereon, that he is no longer their agent and will not inform Dr. Staads where he can be found. Dr. Staads requests that anyone who may learn of the address of Fred Hernbloom, will notify Hon. E. H. English, commissioner of the insurance department of Iowa, or Dr. Staads.

The medical profession is warned against a young man traveling under the name of Paul Goodman, who has claimed to be a representative of the Victor Electric Company, and endeavors to gain the confidence of physicians to induce them to cash a personal check. The Victor Electric Company states that it does not know this man, he has never been in its employ nor handled its goods directly or indirectly. "He is said to be a little fellow, about 22 years old, and all scarred up, and claims the burns were caused by electricity." This man has been operating in Terre Haute, Ind., Omaha and Hastings, Neb. Any physician knowing this man's whereabouts will confer a favor on the Victor Electric Company by sending a collect telegram to the company at its general office in Chicago.

The attention of physicians is again called to the activities of certain young men in Pennsylvania who are attempting to secure subscriptions for *The Journal* and other magazines through a bureau which they call the National Educational Association, the plea being based on the desire of the young men to secure free scholarships. When last heard of the scheme was being pushed in Philadelphia.

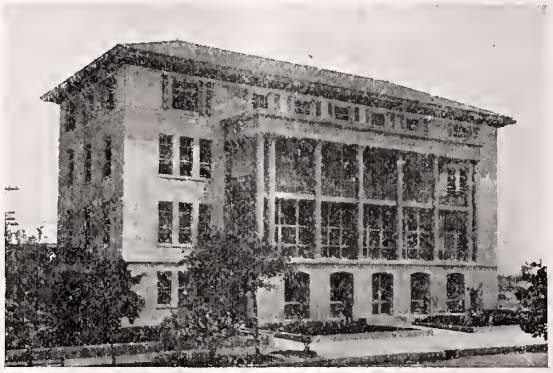
The Journal is informed by Dr. Linsly R. Williams, deputy commissioner of the New York State Department of Health, that a man recently presented himself in Butler, Pa., as George H. Gray, pathologist of the New York State Board of Health, and incurred numerous obligations, after which he left without settling for them. The New York State Department of Health has never had anyone of this name in its employ, and desires to warn others against this imposter.

Dr. Walter F. Rochelle, Jackson, Tenn., calls attention to the fact that a subscription swindler is operating in that district offering subscriptions to current magazines with medical books as premiums. The physicians pay cash in advance and obtain a beautifully embossed green receipt, but the books and magazines are never received.

The Journal of the American Medical Association warns against certain subscription swindlers in Pennsylvania, who have now extended their work to Ohio, and who solicit subscriptions to current periodicals, including medical journals, and claim they are working for scholarships in various universities and colleges. Among the names reported are: George B. Watson, E. B. Huntington and F. L. Daley. Reference should be made to the editorial "The Physician an Easy Mark," published in *The Journal of the American Medical Association* for April 10, 1915, p. 1247.

NEW BUILDING FOR THE MEDICAL DEPARTMENT OF THE STATE UNIVERSITY.

Two splendidly equipped and elegantly designed buildings were on May 1st dedicated to the use of the Medical Department of the University of Texas at Galveston, with appropriate ceremonies. Both of these buildings were badly needed and had been needed for some time. The Woman's Hospital is designed to relieve the congestion in the John Sealy, and will do that and more. Heretofore the nurses have had to be content with an old and somewhat dilapidated building, not intended for the purpose of housing nurses, and much discomfort has therefore been experienced. We are pleased to present herwith views of these two elegant buildings with brief description of each. We heartily commend the beneficence of the Sealys and the foresight of the State.



NURSES' HOME.

NURSES' HOME.

This building is located near the sea-wall, facing the north end of the sea-wall boulevard and overlooking the Gulf. It contains fifty bed rooms in addition to reception room, class room, demonstration room, etc. It is fire-proof throughout, of steel frame and hollow tile construction. There are three large screened galleries twelve feet wide.

The building accommodates fifty-five students in the School of Nursing in addition to the superintendent and officers of the hospital. The basement floor has a diet kitchen, laundry, trunk room, etc., for the Nurses' Home, and at the west end there is a laboratory of clinical pathology, used by the department of clinical medicine.

This building has been named the "Rebecca Sealy Nurses' Home" by the Board of Regents of the University, in recognition of Mrs. Rebecca Sealy's generosity and deep interest in establishing and maintaining the John Sealy Hospital training school for nurses before it became the School of Nursing of the University of Texas.

THE WOMAN'S HOSPITAL.

THE WOMEN'S HOSPITAL.

This building has been erected and furnished throughout by Mrs. R. Waverly Smith and her

brother, Mr. John Sealy, at a cost of $125,000. It is a four-story building, architecturally an adaptation of the Italian renaissance style, designed by Crow, Lewis and Wickenhoefer of New York. It is fireproof throughout, of steel frame and hollow tile construction. The light color of the stuccoed outer walls harmonizes with the dull red tile roof.

On the first floor there are offices, receiving room, etc. At the west end are the waiting rooms and consultation rooms for the treatment of outdoor patients. There are five small wards on the first and second floors for the care of thirty-five indoor patients. On the third floor there are ten private rooms. There are diet kitchens, nurses' duty rooms, preparation rooms, etc., on each floor.

On the fourth floor there is a modern operating room with adjoining sterilizing and preparation rooms. The entire south and east front of the fourth floor is arranged to be used as an open air pavilion overlooking the Gulf of Mexico. This, together with the large galleries, running along the south front of the building, make it possible for convalescent patients to enjoy the sea breeze. The wards are to be used exclusively for surgical, gynecological and obstetrical cases. Medical cases may be treated in the private rooms but not in the wards.

The building has an electric elevator, and is connected with the main hospital by an enclosed passage way.

GOLD MEDALS TO ARKANSAS, LOUISIANA AND TEXAS PHYSICIANS FOR ORIGINAL WORK.

The following communication has been received and is published herewith for the benefit of those whom it may concern. This is a most unusual and entirely worthy project, and it is to be hoped that Texas physicians will compete for the prizes. It so happens that the work itself is sufficient reward, regardless of the prize offered. The communication follows.

"Dear Doctor: Will you kindly insert the following notice in the next issue of the Journal?

The Tri-State Medical Society of Arkansas, Louisiana and Texas, which will hold its next annual meeting at Marshall, Texas, December 14th-15th, offers three gold medals for the best essays on original work, by physicians residing in Arkansas, Louisiana, or Texas. For full particulars apply to Dr. J. M. Bodenheimer, Shreveport, La. Thanking you in advance for the courtesy,

Fraternally yours,
J. M. Bodenheimer, Secretary-Treasurer.

DEAF CHILDREN.

Anyone interested in deaf children can obtain free literature, explaining approved methods of training them from infancy to school age, by writing to the Volts Bureau for the Increase in Diffusion of Knowledge Relating to the Deaf, 1601 Thirty-Fifth Street, N. W., Washington, D. C. This literature relates only to the training of little deaf children; not to medical treatment nor to the deafness that comes in later life. Age of child and other details are welcomed.

NOTICE TO THOSE WHO DISCUSSED PAPERS BEFORE THE SECTION ON MEDICINE AND DISEASES OF CHILDREN.

In order that the best possible results may be obtained, those who discussed papers read before the recent annual session of the Section on Medicine and Diseases of Children, will please at once write out their discussion in full, and mail same to the Secretary, Dr. Holman Taylor, Fort Worth, for attention at the proper time. Certain contingencies arose at the time which prevented a full and proper report of the discussions in question, and it is to be hoped that the several excellent discussions will be reduced to writing as requested. The State Secretary will be glad to give any information desired in regard to any paper discussed. This for the benefit of our reading members and those who were unable to attend the annual session.

Fraternally,
W. B. McKnight, Secretary,
Section on Medicine and Diseases of Children.

PRIZE FOR ESSAY ON SEX HYGIENE.

The American Social Hygiene Association announces that the following committee of judges has been selected to award the prize of one thousand dollars provided by the Metropolitan Life Insurance Company for the best original pamphlet on social hygiene for adolescents between the ages of twelve and sixteen years:

Mrs. Martha P. Falconer, Member of the Board of Directors of the American Social Hygiene Association; Superintendent of Sleighton Farms, Darlington, Pennsylvania. Lee K. Frankel, Ph. D., Sixth Vice-President, Metropolitan Life Insurance Company, New York. Luther H. Gulick, M. D., President, The Camp Fire Girls, New York; formerly Director of Physical Training in the New York City Public Schools. Miss Julia C. Lathrop, Chief, Children's Bureau, United States Department of Labor, Washington, D. C. Milton J. Rosenau, M. D., Professor of Preventive Medicine and Hygiene, Harvard Medical School, Boston, Massachusetts. Victor C. Vaughan, M. D., President of the American Medical Association; Dean, Department of Medicine and Surgery, University of Michigan, Ann Arbor, Michigan. Mrs. Ella Flagg Young, Ph. D., Superintendent of Schools, Chicago, Illinois.

The Metropolitan Life Insurance Company desires to use the winning pamphlet among its industrial policy holders.

A few months ago Dr. Lee K. Frankel, Sixth Vice-President of the Company, presented the following suggestions which have resulted in this prize offer:

"The educational campaign which has been conducted by the Metropolitan Life Insurance Company for a number of years has proven that it is possible to present the basic facts regarding health and disease and in particular the care and prevention of the latter in such a fashion that even the man on the street will become interested and will follow the instruction which is given to him.

"The question at issue is this: Can the social hygiene program be similarly popularized; can pamphlets or literature of any kind be placed in the hands of the great masses of workingmen and women in the United States written in a popular way and yet not give offense? * * * The opportunity for the Social Hygiene Association is at hand. The association may rest assured that whenever literature can be presented which will meet the requirements mentioned above, which can be distributed in the average American home without danger, and which in a dignified, ethical way will present the fundamental principles which this association advocates, insurance companies generally will be only too glad to co-operate with them and utilize the machinery at their disposal for the distribution of such literature among the millions of men, women and children in the United States, who today are policyholders in the life insurance companies."

There has come to be among thinking people who are interested in the progress of human welfare generally a substantial agreement that some form of sex enlightenment must take the place of the old-time "policy of silence." Education, it is recognized,

ought to give to every man, woman or child the command and comprehension of such facts as are essential to his welfare; among these are the facts of sex and reproduction. Religion begins to recognize that the decrees of faith and of conscience are strengthened, not weakened, in the realm of sexual morality by knowledge of the facts of nature and science. Medicine, concerned with the health problems of venereal diseases, finds its ally in popular knowledge of their causes and consequences, and looks to moral and religious sanctions to add force to knowledge. So sex instruction becomes the servant of the great forces which seek the advance of humanity from generation to generation.

The question most likely to be asked by those interested in the competiton are: "What kind of pamphlet is wanted? Is it to be written for boys, or for girls, or for both—or for parents? Must it cover the entire period of the four years specified? Must it take up the physiological changes of adolescence? What sort of instruction may the author assume that the child has had before reading the pamphlet?" To such inquiries the reply is that the prize has been offered for the best solution of the problem of approaching through the printed word the youth of America from twelve to sixteen years of age. If the author is convinced that the indirect approach through the parent is the proper method, he may prepare his manuscript for use by the parent. If he thinks that the most pressing need is for a pamphlet to be placed in the hands of boys, he may prepare his manuscript for that purpose. Similarly, he may prepare it for the use of girls, or, if he thinks it more desirable, he may combine his information into a single pamphlet for the use of both boys and girls.

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1915, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies:"

Cholera Serobacterin, Mulford (Sensitized Cholera Vaccine).—Marketed in packages of three syringes. H. K. Mulford Co., Philadelphia.

Meningo-Serobacterin, Mulford (Sensitized Meningococcus Vaccine).—Marketed in packages of three syringes. H. K. Mulford Co., Philadelphia.

Typho-Serobacterin Mixed, Mulford (Sensitized Typhoid Vaccine).—Packages of three syringes containing graduated mixtures of killed sensitized bacillus typhosus, killed sensitized bacillus paratyphosus A, and killed sensitized bacillus paratyphosus B. H. K. Mulford Co., Philadelphia, Pa. (*Jour. A. M. A.*, March 13, 1915.)

PROPAGANDA FOR REFORM.

Waterman's Tonic Restorative.—Examination in the A. M. A. Chemical Laboratory showed this "epilepsy cure" to be a bromid mixture, containing bromide equivalent to 17.6 grains potassium bromid per fluiddram. The recommended daily dose of five teaspoonfuls corresponds to 88 grains potassium bromid. Caring little for the health or safety of those who use the nostrum, the promoters advise an increased dosage if required "to stop the 'Fits'," thus leaving the dosage with user, who is assured that the nostrum is "safe." (*Jour. A. M. A.*, March 6, 1915.

Dr. Kline's Nerve Remedy.—This "epilepsy cure" is sold by the R. H. Kline Company, 45-47 E. 20th Street, New York City, this being the same address as that of the Lexington Drug and Chemical Company which sends out the Waterman "epilepsy cure" (see above.) Examination in the A. M. A. Chemical Laboratory showed this bromid mixture to be practically indentical with Waterman's Tonic Restorative. (*Jour. A. M. A.*, March 6, 1915.)

Liquid Paraffin (Liquid Petrolatum).—W. A. Bastedo reports the results of a clinical investigation made under the auspices of the Therapeutic Research Committee of the Council on Pharmacy and Chemistry to determine the relative efficiency of the different preparations on the market. Three specimens were sent out: A heavy Russian liquid petrolatum, a light Russian liquid petrolatum and an American liquid petrolatum—being distinguished only by number or letter. From extended trials in hospitals it is apparent that all acted alike. Only slight differences as to palatability were noted by some. (*Jour. A. M. A.*, March 6, 1915.)

Sanmetto.—The Council on Pharmacy and Chemistry finds that Sanmetto is a secret nostrum the exploitation of which is an invitation to haphazard, uncritical therapy and a menace to public health. It is claimed that "Sanmetto is a blending of true santal and saw palmetto with soothing demulcents in a pleasant aromatic vehicle," but neither the identity of the "demulcents" nor the quantities of the other ingredients are given. The recommendations for the use of Sanmetto are unwarranted, absurd and vicious. The advertising claims are likely to induce some physicians to belittle the importance of diseases of the sexual organs and to be content with the prescribing of Sanmetto to the detriment of the patient and the danger of the community. (*Jour. A. M.*, March 13, 1915.)

Colchi-Sal.—Colchi-Sal is sold by E. Fougera and Co., Inc., in capsules stated to contain the "active principle" of cannabis indica, colchicin, methyl salicylate and "appropriate aromatic adjuvants." It is recommended in "Gouty and Chronic Rheumatic Manifestations," "acute cases of gout," "intestinal autointoxication or dyspepsia," "bilious headaches," etc. The Council on Pharmacy and Chemistry found Colchi-Sal ineligible for New and Nonofficial Remedies because the indefinite character of the "active principle" of cannabis indica made its composition secret, because it was advertised indirectly to the laity, because unwarranted therapeutic claims were made for it, because the name does not indicate the habit-forming cannabis indica and because the composition was held unscientific. (*Jour. A. M. A.*, March 20, 1915.)

NEWS

The Panhandle District Medical Society to Meet in Plainview.—The Panhandle District Medical Society will hold its midsummer meeting in Plainview, July 20-21. Plans have been made for a splendid scientific program and elegant social entertainments. A large attendance is expected.

Negro Doctor Faces Charge for Selling Narcotics.—On a charge of selling opium and morphine to patients who did not need such a remedy, Dr. E B. Ramsey, a negro physician of Houston, was arrested May 7, by Special Agent Bliss Stallcup of the internal revenue department. At a hearing before Commissioner Jackson he waived examination and made bond of $500.

The charge against him of violating the new Harrison narcotic law is similar to the charge against Dr. W. F. Bohannon. Under the guise of prescribing a narcotic to a patient, it is charged that an effort was made to evade the law.—*Houston Chronicle.*

Real School Sanitation for Florida.—A bill has recently passed the Florida Legislation providing

for thorough examination of all school children of the state, including the rural schools, under the direction of the State Board of Health. The law also provides for a sanitary survey of all school buildings and their surroundings. This bill was drawn by Dr. O. J. Miller, city health officer of Sanford, Florida, and was passed largely through the efforts of the Health Department of the city of Sanford. Representative Forrest Lake of Sanford, and Senator A. E. Donigan of Tissimmee, introduced the measures in the State Legislature, and to them is due much credit for the enactment of this most excellent law.

The Heights Sanitarium, Houston, Burned.—The Heights Sanitarium, Houston, was completely destroyed by fire June 1. It was a large two-story frame structure containing over 100 rooms and it was used as a hotel for many years. Between 25 and 30 patients were carried out, some of them almost through the flames, on stretchers, but there was no loss of life. Financial loss is estimated at between $25,000 and $35,000. The institution was under the management of the Christian denomination. Origin of the flames not known.— *Houston Chronicle.*

The Heights Sanitarium Directors are pleased to announce, that plans are now under way for the erection of modern fire-proof buildings to replace the frame building recently destroyed by fire.

Dr. W. S. Carter, Re-elected Dean of the Medical Department, State University.—Dr. W. S. Carter, dean of the State Medical College—the department of medicine of the University of Texas—since August, 1903, was re-elected for another year, May 30, at the annual session in Galveston of the board of regents of the university. Other names had been suggested for the post and an effort had been made to place the reins of the medical college in other hands. The medical college committee of the board of regents, in session a greater part of the time from Sunday morning until yesterday, prior to the meeting of the full board went exhaustively into matters referred to them regarding the deanship.—*Galveston News.*

Commencement Exercises Southern Methodist University.—At the First Methodist Church, June 4, the twelfth annual commencement exercises of the medical and pharmaceutical departments of the Southern Methodist University, were held. Following the awarding of diplomas a banquet was served. Members of the medical class awarded diplomas were: Frank Harrison, A. D. Wages and J. L. Kee of Dallas; Van Cookerly of Groesbeck; A. C. Rogers of Waxahachie, and H. W. Maiers of Quinlan. In the pharmaceutical department diplomas were awarded as follows: Miss Adele Gates, Dallas; S. J. Vaughan of Gainesville; A. E. Staffs of San Antonio; Daniel Julian of Kennard, and R. E. McClendon of Gilmer.

Dr. R. S. Heyer presented the diplomas. Bishop E. D. Mouzon delivered the graduating address.—*Dallas Times-Herald.*

New State Institute for the Blind.—In the appropriation bill for the state eleemosynary institutions, passed by the recent legislature, is an appropriation of $250,000 for the establishment of a new state blind institute. It will be recalled that at the last regular session a bill was introduced carrying an appropriation of $500,000 for this purpose, but the measure died for lack of sufficient time to consider it. Thus, the amount is reduced now to $250,000. Another important provision in connection with this appropriation is that it provides that the governor and board of managers of the institution shall select the site and that it need not be necessarily confined to Austin, while in the regular session bill, it was specifically stated that the new institution shall be located on a site near Austin. The $250,000 appropriation is not made available until the fiscal year of 1917.—*Waco News.*

Central Texas District Medical Society to Meet in Corsicana.—The Central Texas Medical Society, comprising about twenty counties, will meet in Corsicana on the 13th and 14th of July. The Navarro County Medical Society is already making arrangements to entertain them. Drs. McClung, Jester and Cross, who were appointed as a committee on arrangement, have made the following announcements:

Scientific meetings at Carnegie Library.

Members of the Central District Medical Society are allowed the privileges of the Y. M. C. A. (baths, etc.)

At 6 p. m., automobile ride.

At 7:30 p. m., reception at Elk's Club, dancing, etc.

From 9 p. m. to 10 p. m., open meeting.

At 10 p. m., smoker on roof garden of the Ideal Theatre.

Finance Committee—T. A. Miller, chairman; E. A. Johnson, W. D. Fountain.

Committee on Place of Meeting—W. T. Shell, chairman; Harry Ezell, S. H. Burnett.

Smoker Committee—L. E. Kelton, chairman; E. H. Newton, R. N. Holloway.

Reception Committee.—I. N. Suttle, J. A. Jones, J. T. Hunt, L. C. Polk.

Hotel Committee—B. F. Houston, chairman; O. L. Smith, Trim Houston.

The Abbott Alkaloidal Company Changes Its Name.—The Abbott Alkaloidal Company has issued the following important and significant statement:

"Owing to the rapid expansion and broad generalization of its business as manufacturing and importing chemists, The Abbott Alkaloidal Company has deemed it expedient to change its incorporate name to The Abbott Laboratories, and has done so. No change in personnel or policies. Our business is to serve the professions, through the general channels of trade, or direct (at the most convenient point) as best serves their convenience. Price list on request.

"For a number of years this company has been broadening out and enlarging the scope of its activities. As most readers of this Journal will remember, some four or five years ago it entered the biologic field and now puts out a full line of serums, antitoxins, vaccines and similar products, both for human and veterinary practice. Also, it is engaged in the manufacture of pure chemicals and is constantly adding to its already large line of pharmaceutical products, many of which are not distinctively alkaloidal.

"It is only fitting and proper, therefore, that a name should be adopted which is broad enough to cover all the activities of this progressive, up-to-date American enterprise."

To All Alumni From the Eastern Colleges.—The first annual banquet for all Alumni from the Eastern Medical Colleges, was held at the Metropolitan Hotel, Fort Worth, the first night of the State Medical Meeting, May 4th. The following members were present from each school: University of Pennsylvania 7, Jefferson 5, Bellevue 6, Johns Hopkins 2, P. & S. of New York 2, Atlanta Medical College 2, Harvard 1, P. & S. of Baltimore 1, making a total of 26.

Dr. J. M. Frazier of Belton, the toastmaster, made *Memories* the subject of the evening, and many responded in a most entertaining manner.

On account of this affair being so successful, a permanent organization was then formed under the name of "The Alumni of the Eastern Colleges," with Dr. J. A. Kyle of Houston, president, and Dr. M. W. Sherwood of Temple, secretary. The purpose of this

organization is to have an annual banquet at the State Medical Meeting each year, and to sincerely hope that the Alumni from these schools will heartily approve this plan of laying aside the individual school spirit, to meet in a united fraternal spirit, where all of the Eastern Alumni may find a hearty welcome, instead of being cast adrift on this night of Alumni banquets.

Next year a much larger attendance is expected, and more elaborate plans will be announced in due season.

Summer School for Health Officers.—On June 6th, the Texas State Board of Health sent out the following letter addressed to the people of Texas:

The University of Texas has kindly consented to establish a summer school for the benefit of the county and city health officers of the state as well as all other physicians and teachers of the state who will attend. The term will be three weeks, beginning June 14, 1915. The exercises will be held in the university Y. M. C. A. building. The program will be as elaborate as can be made in this period of time, consisting of lectures on municipal health, organization and administration of public health, public health laws, vital statistics, antinarcotic law, both state and federal; human carriers of disease, epidemiology, purification of water supply, plumbing and sewers, septic tanks and incinerators, vaccination, rabies and its treatment, infant feeding, baby welfare, sex hygiene, clinical laboratory and its work, method of collecting specimens for bacteriologist, soil pollution, laboratory diagnosis, medical supervision in public schools, serums and bacterins, rural homes, school hygiene and sanitation, rural health problems and pure food.

At the close of each day's session there will be round table talks upon subjects lectured on during the day, or any other subjects chosen by those attending these lectures. There will be no fees charged for this summer health course by the university and the Texas State Board of Health respectfully asks the county and city governments of each county and city to provide sufficient funds for their respective health officers to attend this meeting. This is a forward step in state medicine in Texas and the board of regents and faculty of the university of the state deserve great praise from the people of Texas for their efforts in behalf of public health work in the state.

The Texas State Board of Health, in compliance with the law, respectfully calls a meeting of the city and county health officers of the state to convene in Austin on June 14, this being the date of the opening of the summer health school. We are particularly anxious to have a full attendance of all physicians and public health workers in this school. The good to be derived from this is beyond estimation.

All interested in pure food inspection and pure foods generally as well as any feature of public health work are respectfully requested to attend these lectures. The laboratory work in regard to the pure foods will be done in the state laboratory at the capitol.

All ministers, teachers, club officers, both male and female, of this state are respectfully asked to make this announcement and give it as much publicity as possible, as the time is short for giving notice of this summer school. It is very necessary that each unit of society take a personal interest in this matter.—*Beaumont Enterprise.*

Commencement Exercises, Medical Department State University.—Seventy-three graduates of the medical department of the University of Texas received diplomas May 30, at the graduating exercises held at the Scottish Rite Cathedral.

Dr. S. P. Brooks of Waco, president of Baylor University, was the speaker of the evening, making his address just after Very Rev. J. M. Kirwin of Galveston had pronounced the opening prayer.

"The Physician a Social Force" was the topic of Dr. Brooks' address.

Plea was made by Dr. Brooks for the establishment of a new federal office; a place on the president's cabinet for a medical officer who would head a department for the physical betterment of the men and women of America.

"If your wife gets tuberculosis," said Dr. Brooks, "you may write the United States government for advice. After weeks of waiting you will be rewarded with a letter possibly, conveying the sympathy of the government for you in your misfortune.

"When your hog gets the cholera, you get excellent service from the department of agriculture. Hogs are saleable; there is no market for wives in this generation."

Graduates of the school of medicine were: Cornelius Oliver Bailey, James Daniel Blevins, Edda von Bose, Frank Otis Calaway, Wilbur Carter, Lawrence Evans Chapman, Earl William Clawater, R. Eugene Dyer, Scott Stuart Fay, Milton Hall Glover, Homer Wilford Gough, Casimir Boleslaus Kitowski, Emmett Lemul Graham, Robert Alexander Hale, Joseph Kopecky, Wooten Dudley Lightfoot, Robert Kaskie Lowry, Thomas Richard Lutner, Emil Henry Marek, Zack Jackson Moore, Allen Huddleston Neighbors, Perle Potter Penfield, Adolph Hans Potthast, Otto James Potthast, Thomas Alexander Pressly, Lincoln Frank Putnam, William Edward Ramsay, James William Reid, Hester Bremer Smith, Oliver Abraham Smith, Charles Turner Stone, Sidney Carrington Venable, Walter Marvin Warren, Mildred Washington Weeks.

Graduates of the school of pharmacy were: Brett Simeon Ballio, Harry Karl Brill, Henry Leigh Bartlett, Harry Clarence Bryan, Jesse Hurst Cain, James Sterling Dimmitt, Margaret Verna Glover, George Douglas Graves, Joseph Dudley Hall, Harry Gant Moore Hatler, Garrett Rufus Herring, Alonzo Garner Hervey, Edgar Coleman Cleburne Lawhon, William Jack McKee, Sam Mann, Robert Earl Maris, Colley LaFayette Munford, Walter Wirt Murray, Chester Bernaye Wiggins, James Clifton Wright.

Graduates of the school of nursing were: Ella Erwin Anderson, Rannie Lou Arledge, Kate D. Chandler, Ella Louise Cheatham, Tchula Coleman, Emilie Erck, Ollie Myrtle Fesmire, Omar Hamlett, Hattie Hawkins, Sybil Hawkins, Elizabeth Davis Holmes, Dessie Johnson, Hilma Mork, Bert Neubaurer, Willie Riley, Mary E. Schonka, Cecile A. Sedgwich, Ella A. Swenson, Ora M. White.

Honor students as announced May 30, by Dr. W. S. Carter, dean of the faculty of the medical department of the university, were those graduates who received appointments to interneships in various hospitals according to their standing in the university examinations, or by special competitive examinations, or by individual appointments.

The list, as announced, is:

Interneships awarded according to standing in the university examinations: John Sealy Hospital, Galveston, Joseph Kopecky, W. M. Warren, Wooten D. Lightfoot, L. E. Chapman, Thomas R. Lutner and A. H. Neighbors. St. Marys Infirmary, Galveston, H. W. Gough. St. Josephs Infirmary, Houston, L. F. Putnam. Santa Rosa Infirmary, San Antonio, C. B. Kitowsli and Z. J. Moore. Shumpert Memorial Sanatorium, H. B. Smith.

Interneships awarded by special competitive examinations: Cleveland City Hospital, Cleveland, Ohio, F. O. Calaway and S. C. Venable.

Interneships awarded by individual appointment: Kansas City General Hospital, Kansas City, Mo., R.

K. Lowry. Philadelphia General Hospital, Philadelphia, Pa., E. H. Marek, R. Eugene Dyer and E. W. Clawater. Worcester Memorial Hospital, Worcester, Mass., Miss Perle P. Penfield. Mercy Hospital, Pittsburg, Pa., J. D. Blevins and H. M. Glover.—*Galveston News.*

SOCIETY NEWS.

EL PASO DISTRICT—No. 1.

Dr. F. P. Miller, El Paso, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, El Paso, Secretary. Next meeting will be in Sweetwater, third Tuesday in June.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

El Paso—Dr. C. F. Braden, El Paso; 1st and 3rd Mondays, September to May inclusive.

Reeves-Ward-Pecos—Dr. O. J. Bryan, Pecos.

The El Paso County Medical Society met April 19th. Twenty-three members and four visitors were present. Drs. A. A. Freedman and H. V. Jackson were elected to membership. A committee was appointed to confer with the Ministers' Alliance with a view to co-operating in the care of the tuberculous poor of the city. A committee was appointed to draft a plan for organizing a credit and collecting department to be under the immediate control of the society. The following program was rendered: *The Function of the Omentum in Pathological and Physiological Conditions, With Lantern Slide Illustrations*, Dr. Hugh Crouse. Discussion led by Dr. W. H. Pickels. *Plastic Mastoid Work, Illustrated*, Dr. E. R. Carpenter.

The El Paso County Medical Society met May 17th. Twenty-eight members were present. Dr. C. B. Saxton was elected to membership. Resolutions were adopted indorsing the action of the Texas State Board of Health in its effort to secure better observance of the law regulating the registration of births and deaths. The following were appointed on the Committee on Public Health: Drs. J. M. Richmond, J. W. Tappan and C. F. Braden. This committee will act in an advisory capacity to a similar committee on public health appointed by the Chamber of Commerce. The following program was rendered: *Some Suggestions as to Health Conditions in El Paso*, Dr. W. W. Waite; *Tetanus*, Dr. E. H. Irvin; *What We May Reasonably Expect*, Dr. H. Thompson; *Infections of the Kidneys*, Dr. E. B. Rogers.

BIG SPRINGS DISTRICT—No. 2.

Dr. N. J. Phenix, Colorado, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Ector-Midland-Martin-Howard—Dr. W. F. Johnston, Big Springs; 2nd Thursday quarterly.

Fisher-Stonewall—Dr. R. I. Grimes, Sylvester; 1st Tuesday in January and March.

Haskel—Dr. M. W. Rogers, Rule; 2nd Wednesday quarterly.

Jones—Dr. A. McK. Jones, Anson; 2nd Tuesday monthly.

Mitchell—Dr. T. J. Ratliff, Colorado; 2nd Monday January, April, July and October.

Nolan—Dr. A. A. Chapman, Sweetwater.

Scurry-Dickens-Kent—Dr. J. M. Bannister, Snyder; 1st Tuesday in January, April, July and October.

Taylor—Dr. L. J. Pickard, Abilene; 2nd Tuesday monthly.

The Taylor County Medical Society met in Abilene, April 13th. Six members were present. Communications from the Committee on Insurance of the State Medical Association were read and discussed. Several applications for membership were read and referred to the censors. The program was devoted to case reports by Drs. Bailey, Cates, Swan and Estes, which were discussed at length.

PANHANDLE DISTRICT—No. 3.

Dr. W. C. Dickey, Memphis, Councilor.

District Society—Dr. T. D. Frizzell, Quanah, President; Dr. J. J. Crume, Amarillo, Secretary.

Secretaries of Sections—Surgery, Dr. F. B. Bryan, Childress; Medicine, Dr. E. H. Snyder, Canadian; Gynecology and Obstetrics, Dr. B. L. Jenkins, Clarendon; Pediatrics, Dr. S. P. Vinyard, Amarillo.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Childress—Dr. F. B. Bryan, Childress; 1st Tuesday monthly.

Collingsworth—Dr. H. B. Worley, Wellington; Tuesdays.

Dallam-Hartley-Sherman—Dr. R. L. Owens, Dalhart; 2nd Tuesday.

Donley—Dr. T. H. Ellis, Clarendon; 1st Thursday monthly.

Foard—Dr. R. L. Kincaid, Crowell; 2nd Monday quarterly.

Hale-Swisher—Dr. E. F. McClendon, Plainview; 1st Tuesday monthly.

Hall—Dr. W. C. Mayes, Memphis; 2nd Tuesday monthly.

Hardeman—Dr. T. D. Frizzel, Quanah; 2nd Thursday monthly.

Hemphill-Roberts-Lipscomb-Ochiltree—Dr. H. C. Caylor, Canadian; 1st Monday monthly.

Lubbock-Crosby—Dr. J. T. Hutchinson, Lubbock; 1st and 3rd Tuesdays monthly.

Potter—Dr. J. J. Crume, Amarillo; 2nd Monday monthly.

Wichita—Dr. L. F. Stripling, Wichita Falls; 2nd Tuesday monthly.

Wilbarger—Dr. Richard W. Hix, Vernon; 3rd Monday monthly.

SAN ANGELO DISTRICT—No. 4.

Dr. S. C. Parsons, San Angelo, Councilor.

District Society—Dr. J. M. Horn, Brownwood, President; Dr. R. H. Cochran, Coleman, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Brown—Dr. H. C. Eargle, Brownwood; 2nd Tuesday monthly.

Coleman—Dr. R. Bailey, Coleman; 1st Thursday monthly.

Lampasas—Dr. W. D. Francis, Lampasas; 1st Tuesday March, June, September and December.

McCulloch—Dr. J. S. Anderson, Brady; 1st Monday monthly.

Menard-Kimble—Dr. W. M. Fenley, Menard.

Runnels—Dr. E. R. Middleton, Winters; 2nd Thursday monthly.

Tom Green—Dr. G. W. Nibling, San Angelo; Tuesday before full moon.

The Runnels County Medical Society met in regular session, May 13th, at Ballinger. Drs. Halley, Watson, Love, Blasdell and Shiller of Rowena, a visitor, were present. Four applications were presented for membership. Dr. Love made an excellent talk on *Internal Secretions*, which was further discussed by Dr. Blasdell. Dr. Rape was elected as an honorary member. Dr. Halley gave an interesting report of the Fort Worth meeting of the State Association.

The Tom Green County Medical Society met May 24th in San Angelo. Reports of clinical cases and their discussion opened the program. Dr. Harlan Horney read a paper entitled, *Why the Public So Often Consults Irregulars for Rectal Troubles.* The society received a request from the Civic League to assist in holding the Better Babies Contest on June 8th. A committee was appointed to assist during the several days of the contest. A resolution was introduced and carried, that the privilege of the floor be tendered the members of the Runnels County Medical Society, and that notices of the meetings be sent them regularly. Resolutions were adopted and plans discussed and matured, for the coming district meeting, November 2-3.

SAN ANTONIO DISTRICT—No. 5.

Dr. W. A. King, San Antonio, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr L. J. Manhoff, Aransas Pass, Secretary. Next meeting will be held in Corpus Christi in September.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Atascosa—Dr. B. T. Yule, Charlotte; 2nd Tuesday monthly.

Bexar—Dr. W. H. Hargis, San Antonio; from October to May. 1st Thursday, Section on Eye, Ear, Nose and Throat; 2nd Thursday, Section on Medicine; 3rd Thursday, State Medicine, Public and Personal Hygiene; 4th Thursday, Obstetrics and Gynecology.
Comal—Dr. L. G. Wille, New Braunfels; 2nd Saturday quarterly.
Guadalupe—Dr. M. B. Brandenburger, Seguin; 1st Tuesday monthly.
Gonzales—Dr. W. T. Dunning, Gonzales; 1st Monday monthly.
Karnes—Dr. R. C. Youngblood, Falls City; bi-monthly.
Kerr-Kendall-Gillespie-Bandera—Dr. Wm. Lee Secor, Kerrville; 1st Monday alternate months.
La Salle-Frio—Dr. R. L. Graham, Cotulla; meets quarterly.
Medina—Dr. J. H. Fletcher, Hondo; 2nd Wednesday monthly.
Uvalde-Edwards—Dr. S. B. Hudson, Sabinal; 1st Tuesday monthly.
Val Verde—Dr. D. A. York, Del Rio; 1st Monday monthly.
Wilson—Dr. J. E. Sparks, Floresville; quarterly.

The Guadalupe County Medical Society met in Seguin, June 1st. The following members were present: Drs. Poth, Anderson, Williamson, Knolle and Brandenberger, all of Seguin, and Dr. Benbow of Kingsbury. Dr. Poth read a paper on *Drug Addictions;* Dr. Knolle read one on *Cancer of the Breast.* Both papers were interesting and received discussion from all present. It was decided not to have a regular program for the next meeting, but to invite the county attorney, and discuss ways and means of remedying the practice of medicine and midwifery among certain unlicensed midwives. A telegram was sent on May 10th to the representative, asking that he use his efforts to defeat the Gibson Bill, which the society considered detrimental to the insurance interests of the State.

The Southwest Texas District Medical Society, covering the Fifth and Sixth Districts, met in San Antonio, March 16-17. The meeting was held in the St. Anthony Hotel. Rev. S. J. Porter delivered the invocation; Mayor Hertzberg delivered the Address of Welcome on behalf of the city; Dr. Thos. Dorbandt delivered the Address of Welcome on behalf of the society. Dr. M. B. Grace, Seguin, responded. Dr. Frank D. Boyd, President State Medical Association, addressed the society. The following program was rendered:

Pellagra, Its Causation and Treatment, With Report of Various Ones Tried, Dr. Thad Shaw, San Antonio; *The Doctor and His Literature—My Specialty*, Mrs. F. E. Daniel, Austin; *Laryngeal Diphtheria*, Dr. J. W. Oxford, Floresville; *The Ethical and Imperative Need of Contraceptives*, Dr. Malone Duggan, San Antonio; *Some Pathological Conditions in the Naso-Pharynx and Their Effects on the Human Economy*, Dr. A. J. Caldwell, Corpus Christi; *Primary Nasal Diphtheria*, Dr. C. D. Dixon, San Antonio; *The Treatment of Gastric and Duodenal Ulcer*, Dr. H. F. Connally, Waco; *Carcinoma of the Uterus, With Special Reference to the Percy Method as a Forerunner to Radical Procedure*, Dr. S. M. D. Clark, New Orleans; *The Early Diagnosis of Renal Tuberculosis*, Dr. F. C. Walsh, San Antonio; *Should the Practice of Medicine be Divided into Specialties*, Dr. W. B. Thorning, Houston; *Report of a Case*, Dr. W. B. Russ, San Antonio; *Puerperal Infection*, Dr. Duncan M. Stone, San Antonio; *The Treatment and Cure of Chronic Endometritis*, Dr. L. L. Shropshire, San Antonio; *Spina Bifida, Report of a Case*, Dr. M. J. Perkins, Alice; *Caesarean Section*, Dr. F. U. Painter, Corpus Christi.

The social features consisted of a dinner at the Lee Surgical Hospital, a smoker at the St. Anthony Hotel, and a dinner at the Moody Sanitarium. The next meeting will be held in Corpus Christi in September, at a date to be announced by the President. Fifty-seven out-of-town members were present, in addition to the local members.

CORPUS CHRISTI DISTRICT—No. 6.

Dr. W. N. Wardlaw, Corpus Christi, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary. Next meeting will be held in Corpus Christi in September.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bee—Dr. E. P. Cays, Beeville; Monday quarterly.
Cameron—Dr. C. W. Skipper, Brownsville; 2nd Wednesday monthly.
Hidalgo—Dr. W. R. Dashiell, Mission; 5th day monthly.
Jim Wells—Dr. M. J. Perkins, Alice.
Kleburg—Dr. R. L. Mathews, Kingsville.
Nueces—Dr. A. W. Davisson, Corpus Christi; 1st and 3rd Fridays monthly.
Refugio—Dr. Roy T. Goodwin, Sinton.
San Patricio—Dr. L. J. Manhoff, Aransas Pass.
Webb—Dr. E. H. Sauvignet, Laredo; 1st Wednesday monthly.

AUSTIN DISTRICT—No. 7.

Dr. T. J. Bennett, Austin, Councilor.

District Society—Dr. Z. T. Scott, Austin, President; Dr. W. A. Harper, Austin, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bastrop—Dr. T. B. Taylor, Elgin; 2nd Tuesday bi-monthly.
Burnet—Dr. H. S. Garrett, Bertram.
Caldwell—Dr. Edgar Smith, Lockhart; 2nd Tuesday monthly.
Hays—Dr. P. J. Shaver, San Marcos.
Lee—Dr. C. M. Jones, Ledbetter; 1st Tuesday in June, September, December and March.
Llano—Dr. C. F. Darnall, Llano; 2nd Tuesday monthly.
San Saba—Dr. C. L. Behrns, Cherokee; 2nd Tuesday each month.
Travis—Dr. J. C. A. Eckhardt, Austin; 2nd Thursday monthly.
Williamson—Dr. E. M. Wood, Georgetown; 2nd Wednesday.

DEWITT DISTRICT—No. 8.

Dr. Walter Shropshire, Yoakum, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Colorado—Dr. W. G. Youens, Colorado; 2nd Wednesday February, April, June, August, October and December.
DeWitt—Dr. B. J. Nowierski, Yorktown; 3rd Wednesday monthly.
Fayette—Dr. C. M. Hoch, LaGrange.
Lavaca—Dr. Walter Shropshire, Yoakum; 2nd Tuesday monthly.
Matagorda—Dr. S. A. Foote, Bay City; 2nd Wednesday monthly.
Victoria-Calhoun—Dr. F. L. Sargeant, Victoria; 20th monthly.
Wharton-Jackson—Dr. W. B. Huey, El Campo; 3rd Friday monthly.

The DeWitt County Medical Society met April 21st, at Cuero. Twelve members and one visitor, Dr. Shropshire, were present. The following cases were reported: Dr. Burns, a case of cancerous obstruction of the lower portion of the oesophagus. Dr. Hastings exhibited an *x*-ray picture of the case. Dr. Boothe reported a case of hydatiform mole in a female, aged 25 years. Dr. Burns reported the case of a male, aged 56 years, who was thrown from a wagon, sustaining an injury in the cervical region, with complete paraplegia and hyperasthesia; three cervical vertebrae were found injured, with one body dislocated forward, causing compression of the cord. The patient is improving. Drs. Frobesse and Nowierski reported the case of a man thrown from a wagon, resulting in injury to the left hand; there was a large hematoma and *x*-ray picture showed a fracture of the base of the second metacarpal bone, a spicula perforating the deep palmer arch. Dr. Frobesse reported the case of a Mexican who sustained an injury to the head, with complete loss of speech. Operation showed a round fracture of the parietal bone. The fractured bone was removed, with resulting improvement of speech. The outcome of the three last cases are to be reported at the next meeting. Dr. Shropshire propounded the question, "How to make a county medical society instructive and successful?" This brought out a general dis-

cussion, and each one present offered suggestions.

Dr. J. F. Duncan, Yoakum, was elected to membership on transfer from Fannin County.

A circular from the American Red Cross Society was read, and the president appointed the following as a Committee on Red Cross Medical Work for DeWitt County: Drs. J. W. Burns of Cuero, G. W. Allen of Yorktown, H. H. Brown of Yoakum, G. M. Duckworth of Cuero and B. J. Nowierski of Yorktown.

The DeWitt County Medical Society met May 19th, at Cuero. There were eleven members present. Dr. Eckhardt reported a case of pellagra. Dr. Westphal reported a case of severe scalp laceration. Dr. Gillette reported a case of typhoid fever with unusually high temperature controlled by tub baths. Dr. Reuss reported a case of angina pectoris. Dr. Burns read a paper entitled, *Congenital Pyloric Stenosis, With Report of a Case.*

The DeWitt County Medical Society met at Cuero, June 16th. Eleven members were present. Dr. Frobesse reported a case of lobar pneumonia with delayed resolution; post mortem findings were, lobar pneumonia, septic pleurisy with effusion, and septic pericarditis with effusion. Dr. Reuss reported a case of pleurisy with large effusion aspiration, and death. Dr. Bartlett reported the case of a child ten years of age, with contracture of the leg, probably due to hysteria. Dr. Allen reported a severe gunshot wound destroying the entire elbow joint. Dr. Holland reported the case of a child with a full grown tick in the ear. Dr. Allen reported a case of abdominal tumor in which he suspected the breaking down of a fibroid. Dr. W. H. Holland of Goliad, was elected to membership.

SOUTHERN DISTRICT—No. 9.
Dr. W. W. Ralston, Houston, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Austin—Dr. Otto E. Steck, Bellville; 1st Tuesday quarterly.
Brazos—Dr. R. J. Hunnicutt, Bryan.
Brazoria—Dr. A. J. Pollard, Alvin; 1st Thursday after 1st Monday.
Burleson—Dr. T. L. Goodnight, Caldwell.
Fort Bend—Dr. R. M. Munroe, Richmond.
Galveston—Dr. M. L. Graves, Galveston; last Friday monthly.
Grimes—Dr. E. A. Harris, Navasota; 1st Wednesday monthly.
Harris—Dr. B. T. Van Zant, Houston; every Friday night.
Madison—Dr. J. E. Morris, Madisonville; last Tuesday monthly.
Montgomery—Dr. H. W. Earthman, Conroe; 2nd Monday monthly.
Waller—Dr. R. E. Bing, Waller; 1st Monday quarterly.
Walker—Dr. J. W. Thomason, Huntsville; 2nd Tuesday bi-monthly.
Washington—Dr. R. H. Lenert, Brenham; quarterly.

The Harris County Medical Society met in Houston, April 3rd, with 38 members present.

Dr. McNeil reported a case of syphilitic ulcer of the stomach, similar to one reported a year ago. The patient was a negro, 43 years old, with a history of syphilis 19 years ago. The present trouble dates back two years, and the symptoms are principally pain, 30 minutes after eating, with acid belching. Wassermann reaction positive and stomach reaction showed absence of free hydrochloric acid; total acid, 25. Patient was put on salvarsan and potassium iodid, and gained fifteen to twenty pounds in a short while.

Dr. Spurlock reported a case of regurgitation following the effort to swallow, in a young man 24 years old, who, when a child, had swallowed lye, for which a bougie had been extensively used. Oesophageal bougies were again used, and the trouble cleared up. Dr. Mynat reported a similar case in a child, following the swallowing of lye. The use of oesophageal of bougies relieved this patient also.

Dr. F. H. Neuhaus read a paper on *Some Remarks on Indigestion.* In the discussion, Dr. Green agreed with the author that a great many reflexes were diagnosed as indigestion, and that there is a strong temptation for the specialist to interpret all symptoms from the standpoint of his specialty. The great need in this class of cases is for careful differential diagnosis. Dr. York said that any disease may reflexly influence the stomach, thereby producing indigestion. The effect of fright, joy and great emotions, purely psychical, are often to the same end. When the stomach works the brain should rest, and vice versa. Great excitement following a heavy meal may produce vomiting in a child. Dr. S. C. Red said that indigestion is undoubtedly produced by other than organic diseases. There are a multiplicity of causes, and one of the most fruitful is ice water; another cause is the presence of pus in the system, and still another is the excessive use of tobacco and alcoholic beverages. Such toxic agents lower vitality and anorexia is produced, which is a wise provision of nature, as food under the circumstances would not be digested. Stomach cases are hard to handle, and if they were eliminated from the practice of medicine, many doctors would likewise be eliminated. Dr. McNeil said that when a young man complains of indigestion, his love affairs had better be investigated. Thinks most cases are functional, and the real stomach specialist is the one who can separate the functional from the organic. The diagnosis of organic disease of the stomach is much harder than that of functional disturbances. Most cancer cases are diagnosed first as functional. Dr. Short called attention to auto-intoxication, resulting from errors in diet, particularly in the matter of fried foods, highly seasoned food, and the excessive use of coffee. The so-called heart trouble is frequently a reflex from this source. Pyorrhea is a frequent cause of indigestion and should always be suspicioned. Decayed teeth and sore mouth are also fruitful sources, and the dentist should be consulted frequently in such cases. Dr. Greenwood called attention to the bearing of cerebrospinal diseases on the general subject of stomach diseases and indigestion, particularly locomotor ataxia. There is also frequently a psychic cause, the patient having an idea that there is serious stomach trouble, and developing a morbid fear of food. Moral encouragement will aid in clearing up this class of cases. Dr. Jno. T. Moore said that post mortem examinations demonstrate clearly that the stomach itself is not often diseased. Aside from the frequent occurrence of ulcers and cancers in the stomach, that organ is rarely ever diseased. The subject of indigestion is a blanket which covers a world of ignorance and deception. In 95 per cent of such cases, some other organ will be found at fault. Drs. McLaughlin and Morris took up the study of the stomach and quit in disgust. The stomach is inhumanely treated, abused and dosed, when it is really affected as infrequently as any organ of the body. Brain lesions, love affairs, even a corn or tight shoes, will produce stomach disorders. He said that he had recently seen two cases of diabetis in which treatment had been directed to the stomach. Heart lesions, arterial changes, etc., are likewise frequently so treated. Dr. Thorning said that few cases of indigestion would be wrongly diagnosed if the physician were able to give them the close study they require. Organic lesions anywhere, gall bladder, appendix, etc., may result in indigestion. If due to one of these causes, there

are other symptoms that will help to make the diagnosis exact. Intelligent treatment will usually relieve fuctional disturbance of the stomach, and when relief is not obtained in this manner, organic lesions should be suspected.

THE HARRIS COUNTY MEDICAL SOCIETY met in Houston, April 10th, with 48 members and 2 visitors present.

Dr. G. C. Lechenger read a paper on *Spinal Puncture*. In discussing the paper, Dr. Bertner said that the practice was useful in uremic conditions and in delerium tremens. He called attention to cerebral myelia as a contra indication to this practice. He said that vertigo is frequently cured by spinal puncture, and that hydrocephalus is frequently relieved. Dr. Cooke thinks the procedure is neglected more than it should be. There is comparatively little pain and practically no risk, and the results are often very beneficial. He is convinced that certain tests of spinal fluid should not be neglected. In many cases where the Wassermann reaction is negative, following provocative treatment, spinal fluid will prove to be positive. Sometimes we can get a positive diagnosis of syphilis in five minutes after the use of the colloidal gold test, even when the Wassermann is negative. Recently a case reported as meningitis showed a spinal fluid with a 4 plus positive reaction. Dr. Hargis suggested that the frequent tapping in cerebrospinal meningitis, might have in itself proven as valuable in many cases as the serum so widely used, and wondered whether the introduction of normal saline would not have done as well. Dr. Turner said that in Kansas City during the cerebrospinal meningitis epidemic there, the death rate was 80 per cent. When the serum could not be had, 5 per cent phenol was used, and the death rate in these cases was 48 per cent.

Dr. F. N. Gray presented the "Cuban Twins," a perfect example of dicephalic Omphalopagus xiphodidymus. They are girls 29 months old, and weigh 45 pounds. They weighed 12 pounds at birth. The mother is a small woman and the father a small man. They were born without the assistance of a physician, and it is said that both were head presentations. The mother has since borne one perfectly healthy and normal child. The band of union is 13 inches in circumference and extends from the xiphoid to the umbilicus. There is a slight umbilical hernia. *X*-ray plates were exhibited by Dr. Van Zant.

THE HARRIS COUNTY MEDICAL SOCIETY met in Houston, April 17th, with 64 members and 6 visitors in attendance. Papers by Drs. Sidney Israel and H. L. McNeil, intended for the program of the annual session of the State Medical Association, were read by title.

The secretary warned the members against a man by the name of Shuman, representing himself as in the employ of the Pope Medical Directory.

Dr. Dunlap of Dallas, read a paper by invitation, on *Etiology of Gyneeological Conditions*. In the discussion, Dr. Hodges stated that he had found constipation a frequent cause of severe pelvic disturbances. He was of the opinion that constipation caused stagnation in the nervous system of the pelvic region, bringing about a weakening of the ligaments and consequent sagging of the uterus and tubes, followed by general prolapse and ptosis of viscera and uterus. Rapid pregnancies and labors cause a condition in which there is no general ptosis, but a general sagging of the uterus and appendages, with some slight adhesions, and in which condition the patient is very nervous and even hysterical, with no pathology to account for it. He does not find as many local lesions due to gonorrhea as he had expected. He had seen few cases of chronic constipation and few cases of cancer, either in clinics or private practice, among negro women. Dr. John T. Moore said that cervical tears and erosions are as common in the colored race as among the white, but the negro does not apply for treatment as frequently because of fear of pain. The infrequency of cancer in the negro is remarkable, but the study of this disease tends to the conclusion that those races most primitive in their habits are the least effected by cancer. Heavy eating and much rich food means a greater frequency of cancer.

THE HARRIS COUNTY MEDICAL SOCIETY met in Houston, April 24th, with 31 members present.

The secretary called attention to the difficulty experienced in keeping the program for the scientific sessions of the society filled, when a large number of excellent papers are read by caption before the society, and during the last few meetings before the annual session of the State Association. He suggested that in the future, it be required that all such papers be read in full and discussed before being allowed to go on the State Association program. He said that in his opinion, it was required that these papers be read before the county societies in order to insure a better class of papers for county societies. Dr. S. C. Red said that in his opinion, the reason for this requirement is that such papers may be whipped into shape before presentation to the State Association, and unworthy papers in this manner weeded out. He did not feel that any paper should ever be read by caption. He made a motion that in future all papers intended for the State Association program be read in full before the county society, and that said papers be not under any circumstances read by caption. The motion was carried.

Following the completion of the regular routine of business, the society adjourned.

THE SOUTH TEXAS DISTRICT MEDICAL SOCIETY held its 37th semi-annual meeting in Victoria, April 8-9. The following program was rendered:

Invocation, Rev. W. M. Crutchfield; Address of Welcome, Hon. V. B. Proctor; Response, President, Dr. M. F. Bledsoe.

Chenopodium in the Treatment of Uncinariasis, With Experiments on Dogs, by Dr. Will P. Coyle, Orange; *Respiratory Symptoms in Heart Disease*, by Dr. J. S. Lankford, San Antonio; *Emetin in the Treatment of Diarrhea*, by Dr. J. P. Hewson, Orange; *The Rational Use of Emetin in the Treatment of Pyorrhea*, by Dr. T. F. Coyle, Orange; *Some Stomach Cases*, by Dr. J. T. Halsey, New Orleans; *Duty of the Medical Profession to Public Health*, by Dr. C. C. Green, Houston; *Better Health in Our Schools*, by Dr. F. J. Slataper, Houston; *Enforcing Division Six, Section Two, of the Texas Food and Drug Law*, by Dr. W. F. Thomson, Beaumont; *The Strong Factor in the Enforcement of Sanitary Laws*, by Dr. B. L. Arms, Galveston; *Medical Examination a Pre-Requisite to Marriage*, Dr. J. J. Terrill, Temple; *Illustrated Lecture*, Dr. Isadore Dyer, New Orleans; *A More Conservative Course Essential for the Indiscriminate Removal of the Appendix*, Dr. J. H. Reuss, Cuero. *The Modern Surgical Treatment of the Tonsil*, Dr. Sidney Israel, Houston. A plea for conservatism when dealing with the removal of the tonsils and calling attention to the serious mishaps that may occur or follow a too radical tonsillectomy, with injury to adjacent structures. Discussing and describing a suction apparatus of the author's own designs to carry away blood and secretion that accumulates in the patient's throat, keeping the field dry during the entire operation. Advising against the use of sharp instruments in the performance of a majority of tonsillectomies,

on account of greater liability to hemorrhage and adjacent tissue destruction. Recommends the use of the Beck Tonsilltome, as giving more satisfactory results in regard to lessened time during operation, practical freedom from hemorrhage and tissue destruction. Discourages the reckless and improper removal of the tonsil by those especially prepared and equipped for doing this character of work. Considers tonsillectomy under a general anaesthetic, distinctly a hospital case. Dr. G. M. Duckworth, Cuero, strongly advocated a conservative use of surgery in the treatment of this trouble in young children. The function of the tonsils being protective, their removal while the organs of the throat are in a formative and growing condition, is apt to cause adhesions and stricture, interfering materially with the proper growth of the organ of speech and the pharyngeal muscular development. Did not advocate radical measures before the age of fifteen years. Dr. Walter Shropshire, Yoakum, spoke from the standpoint of the country doctor. Advocated non-interference unless inflammation was repeated and extensive, in which case he thought one removal better than repeated treatments. Dr. John H. Foster, Houston, said that proper removal of the tonsils will never produce injury. Favored early operation. Good results follow Sludor operation. Use of suction apparatus for cleansing throat and carrying off the flow of blood is very important. Dr. Borden, Victoria, thought all such cases should be referred to specialists. Dr. A. J. Caldwell, Corpus Christi, thought there were too many assaults with intent to remove the tonsils. It is the duty of the general practitioner to refer these cases to specialists having proper instruments and special training. Dr. Israel could not agree with Dr. Duckworth. If the tonsils are diseased, they should come out.

Report of 29 Cases Operated by the Watkins-Wertheim Method for the Relief of Systocele and Uterine Prolapses, Dr. Belle C. Eskridge, Houston. *Some Anesthetic Dangers*, Dr. J. T. Halsey, New Orleans. A brief discussion of the following points: The danger of sudden heart failure in light chloroform anesthesia; its mechanism; that it is the incomplete chloroform anesthesia that is the greatest danger, and it is the great fear of giving too much chloroform that is the cause of so many so-called chloroform deaths. There is practically no danger in the use of chloroform in obstetric cases, but no doctor should use chloroform in ordinary cases of this kind. Dr. Thompson supported Dr. Halsey's idea absolutely. Had been raised in a chloroform atmosphere, when two or three deaths occurred each year from anesthesia.

Cancer of the Lip, Dr. John T. Moore. Any lesion or ulcer of the lip which does not heal in a short time and to simple treatment, should be regarded as a threatened cancerous condition, especially so if the glands are at all involved. The great difficulty with this disease is that cases are referred to the surgeon only after the trouble has become deep seated and has been treated and probably aggravated by many home and patent quack remedies.

X-ray Diagnosis for Gall Stones, Dr. B. T. Van Zant, Houston; *Traumatic Myostitis Ossificans*, Dr. T. L. Williams, Victoria; *Operative and After-Treatment of Grave Surgical Risks*, Dr. J. E. Thompson, Galveston; *Discussion of Endometritis*, Dr. A. E. Sweatland, Nacogdoches; *Abdominal Pregnancy With Report of Case*, Dr. W. B. Thorning, Houston. The writer takes the ground that primary abdominal pregnancy is inconceivable and that the etiological factors must be sought among the causes of extra-uterine pregnancy. Dr. J. H. Reuss, Cuero, did not believe primary abdominal pregnancy possible; was sure that all cases were tubo-abdominal abortions. Dr. Thorning stated that the pregnancy depended upon the location of the ovum. Was not prepared to say that primary abdominal pregnancy could not happen. Placental attachment depends also upon the location of the impregnated ovum.

A Congenital Pyloric Obstruction, Dr. J. W. Burns, Cuero; *Inversion of the Uterus, With Report of a Case of Complete Inversion With Prolapse*, Dr. L. D. Kirkham, Houston; *Post Partum Treatment of Eclampsia*, Dr. J. R. Frobese, Cuero. Dr. S. C. Red, Houston, suggested that most cases of eclampsia get well under any treatment. Thinks doctors suffer from chloroformophobia and believes that all post-partum eclampsias get well. Dr. C. C. Green, Houston, regards post-partum eclampsia more serious than ante-partum. Advocates chloroform in the control of convulsions; if anesthesia is to be maintained for several hours, thinks ether better. Always possible, he thinks, to medicate by stomach, through the nose. Dr. Frank King, Houston, regards post-partum eclampsia as a serious condition; disturbs both physician and patient. He believes that medication by stomach or rectum useless, since no absorption takes place from these organs during eclampsia. He denies the existence of high blood pressure in these cases and maintains that a low pressure is the rule. He advocates the liberal use of morphine, to full physiological affect. Dr. W. B. Thorning, Houston, takes issue with Dr. King, and says that Dr. King is alone in the stand that high blood pressure does not exist. He advocated chloroform during the eclampsia seizures. Dr. J. H. Reuss, Cuero, did not believe there was a man in Texas who had tided over a case of eclampsia without chloroform. The use of ether, he says, is ridiculous in any convulsion. Dr. Geo. H. Lee, Galveston, classifies cases into (1) nephritic toxemia and (2) hepato-toxemia. In the first class there are kidney failure, oedema, albumen and casts. In this class must diagnose early. He regards post-partum eclampsia as most fatal. In the nephritic group avoidence of ether; in the hepato group give chloroform. Morphine is administered if the blood pressure is high; the tongue is protected, hot packs are employed and calomel given freely. He advocates the use of croton oil when indicated. Blood letting, he things, has a place in the treatment. Observes that the blood pressure is high in 80 per cent of cases.

Precancerous Condition of the Cervix Uteri, Dr. Frank B. King, Houston. The forward looker in medical thought has adopted the belief and teaching that there is a precancerous period or condition; that the proper clinical interpretation of this incipient indication would lead us to the possible goal of preventing or curing, 100 per cent of our cancers. The concurrent study of the predisposition of certain human beings to develop a fertile field by ancestral analogy, must play a prominent part. Further considers cancer a disease or growth, showing a preference for well matured people, especially women at or near the menopause, which would argue against the specific parasite as a causative element in its production. The irritative theory will be advanced as the most rational in proving the precancerous condition. Dr. H. A. Barr, Beaumont, believes that many precancerous conditions are overlooked and neglected and thinks that the profession should pay more attention to the repair of lacerations incident to child birth.

The Patients We Neglect, Dr. Will P. Coyle, Orange; *Obstetrics in Theory and Actual Practice*, Dr. J. H. Mackey, Francitas; *Treatment of Carcinoma of the Uterine Cervix*, Dr. H. W. Kostmayer, New Orleans. The internal iliac arteries and one ovarian artery are tied. The hand is then kept in the abdomen to guide the application of heat to the growth below by means of the Percy electric cautery.

This cauterization is repeated one, two or even three or four times, the abdomen being opened each time, if indicated, until gross appearance of carcinoma disappears, when radical hysterectomy is performed. Cases are arbitrarily divided as follows, for purpose of treatment: (1) Incipient or definitely operable cases. (2) Borderline cases, where there is a well founded suspicion of invasion of the peri-uterine tissues. (3) Definite fixation of the lower uterine segment and upper vagina; that is, more or less extensive invasion of peri-uterine tissues, without involvement of the bladder or rectum. (4) Bladder or rectum involved—absolutely hopeless. Dr. J. H. Reuss, Cuero, reports cases in which the cautery, without special instruments, was applied. Though these cases were considered inoperable they are still living, two years after the operation. He believes every woman with cancer ought to have a chance. Dr. W. B. Thorning, Houston, believed the surgeon warranted in attempting a radical removal. Has never been able to apply the Percy cautery except in preliminary work. Dr. Kostmayer, closing, stated that the heat extended from one to two inches and that most of the glands were not exposed. He believes that where glandular involvement exists there is little hope. He explained that excessive heat was neither desired nor essential. 120 degrees was the temperature used—while the tissues would stand 130 degrees without charring.

On Thursday from 5 to 6 the visitors were treated to an automobile ride to points of interest. In the evening, from 6:30 to 7:45, there was a banquet at the K. of P. Hall, served by the German Catholic Ladies' Church Building Association.

Immediately following the banquet, a public health meeting was conducted in the Presbyterian Church. Dr. C. C. Green, Chairman of the Public Health Section, presided. Dr. A. L. Lincecum, Assistant State Health Officer, spoke on the importance of vital statistics, and urged that the physicians and the people co-operate to improve the bookkeeping department of the Public Health in Texas. Dr. B. L. Arms, of the Laboratory of Preventive Medicine, Galveston, advanced forceful arguments in favor of general public health measures. Dr. J. J. Terrill, Temple, urged the teaching of sex hygiene to children.

The following resolution was presented by Dr. Walter Shropshire, Yoakum:

RESOLVED, that the by-laws of this Association shall be changed to read that annual, instead of semi-annual, meetings shall be held; and that the annual meeting shall be held in the autumn at either Houston or Galveston. Also, that the membership of the South Texas District Medical Association shall continue to be composed of the Eighth, Ninth and Tenth Councilor Districts; and further, that each District shall hold one annual meeting of its membership in the Spring.

Drs. O. S. McMullen, Victoria; Frank B. King, Houston, and D. S. Wier, were appointed a committee to consider Dr. Shropshire's resolution, and report at the next meeting.

Nacogdoches was selected as the next place of meeting.

SOUTHEASTERN DISTRICT—No. 10.

Dr. A. R. Sholars, Orange, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thompson, Beaumont, Secretary. Next meeting in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Hardin—Dr. Lee Selman, Olive; last Saturday monthly.

Jasper-Newton—Dr. D. McMicken, Kirbyville; 4th Wednesday quarterly.

Jefferson—Dr. B. P. Holland, Beaumont; 1st Monday monthly.

Nacogdoches—Dr. T. J. Blackwell, Nacogdoches; 2nd Wednesday monthly.

Orange—Dr. A. R. Sholars, Orange; 1st Tuesday monthly.

Polk—Dr. T. H. Bates, Camden; 1st Wednesday monthly.

Sabine—Dr. W. T. Arnold, Jr., Hemphill; 2nd Wednesday monthly.

Shelby—Dr. J. H. Windham, Shelbyville; 2nd Tuesday monthly.

THE NACOGDOCHES COUNTY MEDICAL SOCIETY met in regular session, June 9th. Fifteen members were present. A paper on *Trachoma* was read by Dr. M. W. P'Pool, and discussed by Dr. W. I. M. Smith. Dr. A. E. Sweatland read a paper on *Malaria*, which was discussed by Dr. G. S. Barham and Dr. A. R. Sholars of Orange.

EASTERN DISTRICT—No. 11.

Dr. Albert Woldert, Tyler, Councilor.

District Society—Dr. W. P. White, Henderson, President; Dr. J. B. Ramsey, Alto, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Anderson—Dr. E. B. Parsons, Palestine; 1st Monday monthly.

Angelina—Dr. J. C. Van Nuys, Lufkin; 1st Tuesday monthly.

Cherokee—Dr. T. H. Cobble, Rusk; 4th Tuesday monthly.

Freestone—Dr. E. V. Headlee, Teague; 1st Tuesday monthly.

Henderson—Dr. A. H. Easterling, Athens; 1st Mondays.

Houston—Dr. W. W. Latham, Crockett; 2nd Tuesday monthly.

Leon—Dr. V. L. Smith, Jewett; 1st Tuesday in April; 2nd Tuesday in October.

Panola—Dr. A. M. Baker, Carthage.

Rusk—Dr. W. P. White, Henderson; 2nd Tuesday quarterly.

Smith—Dr. L. P. Tenney, Troup; 2nd Tuesday monthly.

Trinity—Dr. W. H. Pope, Jr., Trinity; 3rd Thursday quarterly.

THE ANDERSON COUNTY MEDICAL SOCIETY met June 7th at Palestine. Nine members and two visitors were present. Dr. G. H. Moss, Frankston, was elected to membership. The committee on medical library recommended that one be purchased and placed in the Carnegie Library. The report was adopted. Dr. R. M. Dunn read a paper on *Pellagra*, which received free discussion by all members.

CENTRAL DISTRICT—No. 12.

Dr. A. C. Scott, Temple, Councilor.

District Society—H. C. Black, President; Dr. H. F. Connally, Waco, Secretary. Next meeting will be in Corsicana, July 13 and 14, 1915.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bosque—Dr. C. C. Cate, Morgan; 1st Wednesday.

Bell—Dr. L. R. Talley, Temple; 1st Wednesday quarterly.

Comanche—Dr. Charles Ory, Comanche; 1st Thursday monthly.

Coryell—Dr. Ed. Graves, Gatesville; last Wednesday bi-monthly.

Erath—Dr. S. D. Naylor, Stephenville; 2nd Wednesday bi-monthly.

Falls—Dr. Aug. Streit, Marlin; 1st and 3rd Mondays.

Hamilton—J. H. Wysong, Hico; 2nd Wednesday monthly.

Hill—Dr. J. E. Boyd, Hillsboro; 2nd Friday.

Hood-Somervell—Dr. G. D. Ross, Paluxy; Wednesday before the full moon.

Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.

Limestone—Dr. M. M. Brown, Mexia; 3rd Thursday bi-monthly.

Milam—Dr. G. B. Taylor, Cameron; 2nd Tuesday bi-monthly.

McLennan—Dr. D. L. Eastland, Waco; 1st Tuesday.

Navarro—Dr. W. D. Cross, Corsicana; 1st Monday.

Robertson—A. J. Sharp, Franklin; 2nd Tuesday bi-monthly.

THE JOHNSON COUNTY MEDICAL SOCIETY met in Cleburne, April 20. Eight members were present. Dr. J. P. Lee, Venus, was elected to membership. Dr. J. D. Osborn read a paper on *Sex Hygiene*, which was well received and discussed by all present.

THE MILAM COUNTY MEDICAL SOCIETY met in

Cameron, June 8th. The following program was rendered: *Infant Feeding Up to One Year of Age*, Dr. J. L. Crawford, Burlington; *Some Practical Considerations in Connection With Vaccine and Serum Therapy*, Dr. C. E. Gilliland, Austin; *Vaccines in Gonorrhea*, Dr. T. S. Barkley, Rockdale; *The Management of Diphtheria Under Quarantine, With Special Reference to Carriers*, Dr. J. E. Robinson, Temple; *Symptoms and Diagnosis of Gastric Ulcer*, Dr. G. V. Brindley, Temple; *Local Anesthesia in Major Surgery*, Dr. H. R. Dudgeon, Waco. Immediately after adjournment an elaborate spread was enjoyed at the Auditorium Hotel. Those present were Drs. Coulter and Barkley of Rockdale, Best, Taylor, Epperson, Monroe, Gill, Greer and Sapp of Cameron, Crawford of Burlington, Kirkland of Milano, Dudgeon of Waco, Gilliland of Austin, Goodnight of Caldwell and Taylor of San Saba.

The Navarro County Medical Society met May 3rd, at Corsicana. Fifteen members were in attendance. Dr. G. M. Liddell, Purdon, was elected to membership. It was voted to pay the expenses of the secretary in attending the annual meeting of the State Association at the Fort Worth and all future meetings. Dr. Burnett presented a patient, a little girl, who was examined by those present. The case was discussed by Drs. Jones, Fountain and Cross, all concurring in a probable diagnosis of pellagra, not as yet well developed. Dr. Harry Ezell, a dentist, read a paper on *Oral Sepsis*. He presented his subject in a concise and scientific manner. He discussed the many evils of unclean mouth and teeth. The paper was discussed by Drs. Hunt, Holloway, Jones, Cross, Jester, Newton and Fountain. Dr. W. D. Fountain presented a paper on *Osteomyelitis*, dealing with the proper care of infectious diseases of the bones, particularly the matter of early diagnosis and surgical treatment. The paper was discussed by Drs. Newton, Burnett, Hunt, Kelton and Cross.

The Navarro County Medical Society met June 7th, at Corsicana. Twenty-five members were present. Dr. Sanders and Dr. McMullan each presented clinics, which were examined and discussed by several. Dr. J. A. Jones presented a paper on *Adenoids*, which was well received and discussed. Dr. J. H. Fry presented an interesting paper on *Helminthiasis at the State Orphan Home*. This paper was discussed by Drs. Hill, Fountain and Newton, Dr. Fountain being especially well informed on this subject, particularly on fish bait. Dr. Shell, a member of the hospital board, brought up the question of the advisability of adding another story to the Physicians and Surgeons' Hospital, which project met with the approval of the society. Plans for the next meeting of the Central Texas Medical Society, which will be held in Corsicana, July 13-14, were discussed. Dr. W. J. Baze of Barry, was elected to membership.

NORTHWESTERN DISTRICT—No. 13.

Dr. J. H. Ball, Crystal Falls, Councilor.

District Society—Dr. J. H. Eastland, Mineral Wells, President; Dr. R. A. Duncan, Graham, Secretary. Next meeting will be in Mineral Wells, October 12-13.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Baylor—Dr. C. E. Johnson, Seymour; 2nd Tuesday.
Clay—Dr. B. M. Puckett, Henrietta; 2nd Wednesday.
Eastland—Dr. W. P. Lee, Cisco; 2nd Tuesday bimonthly.
Parker-Palo Pinto—Dr. E. A. Davis, Mineral Wells; 2nd Tuesday monthly.
Stephens—Dr. J. H. Ball, Crystal Falls; 1st Tuesday quarterly.
Throckmorton—Dr. D. C. Wylie, Throckmorton.
Young—Dr. W. H. Logan, Graham; 2nd Tuesday bimonthly.

The Northwest Texas Medical Society held its 43rd semi-annual session in Wichita Falls, April 13-14, 1915.

After the invocation by Dr. F. P. Datson, the society was addressed by Dr. Joe E. Daniel of Wichita Falls. This address was full of wit and kept the audience in laughter during the entire time. Following Dr. Daniel, Dr. Lawson of Bowie, gave a short impromptu talk. The meeting then adjourned until 2 p. m., when the regular program was taken up, as follows:

Surgical Treatment of Hemorrhoids, Dr. L. T. Lawson, Bowie; *The Cystocope and Why It Should Be Used More by the General Practitioner*, Dr. A. I. Folsom, Dallas. This paper was discussed by Drs. Q. B. Lee of Wichita Falls, G. D. Bond, Bacon Saunders and C. O. Harper of Fort Worth. The concensus of opinion was that the cystocope was as yet an instrument for the expert and that the general practitioner was too busy, and did not have enough of this work to do to make him proficient enough to interpret his findings.

The Modern Treatment of Congenital Dislocation of the Hip, Dr. J. S. Davis, Dallas. This paper was discussed by Drs. Everett Jones, Wichita Falls, C. H. Harris, Chas. H. McCollum and Geo. D. Bond, Fort Worth. *Preoperative Diagnosis*, Dr. C. O. Harper of Fort Worth. Discussed by Drs. A. I. Folsom, Dallas and Geo. D. Bond, Fort Worth.

Bone Graft, Report of Cases, illustrated by Stereopticon, Dr. C. H. Harris, Fort Worth. Dr. Harris presented three clinics. Discussed by Drs. Bacon Saunders, C. O. Harper, Joe Daniel, M. F. Sherrill and J. S. Davis.

A Plea for Early Diagnosis and Surgical Treatment of Infected Gall-Bladder, Dr. Wade H. Walker, Wichita Falls. This paper was generally discussed.

The Differential Diagnosis of Typhoid Fever and Appendicitis, Dr. Everett Jones, Wichita Falls. Discussed by Drs. T. C. Terrell and C. H. McCollum, Fort Worth, J. M. Ballew, Memphis and R. A. Duncan, Graham.

The Surgical Treatment of Acute Epididymitis, Dr. Q. B. Lee, Wichita Falls; *Secondary Hemorrhage*, Dr. M. M. Walker, Wichita Falls; *Factors Determining the Morbidity of Surgical Cases*, Dr. B. E. Brazelton, Bridgeport; *Etiology of Cancer*, Dr. Duane Meridith, Wichita Falls; *X-ray Treatment of Deep-Seated Cancer by the Heavy Filter and Cross-Fire Method*, Dr. Geo. D. Bond, Fort Worth.

The meeting then adjourned for an automobile ride over the town and to Wichita Lake. On returning a sumptuous feast was enjoyed by all. This was followed by several vaudeville numbers. Several local aspirants for Jack Johnson's title were brought in and the members enjoyed an hour's fun watching the best darky win.

Following this entertainment Judge P. A. Martin delivered an address on *Expert Medical Testimony*. He paid a glowing tribute to the progress of medicine and urged some needed reforms in the care of the insane and other problems of medical jurisprudence. His address was heartily applauded. Dr. Joe E. Daniel of Wichita Falls, gave an address on *Medical Life Insurance*, after which the meeting adjourned for the night.

The program for the second day was as follows: *Pneumonia Complicated by Meningitis*, Dr. A. D. Patillo, Electra; *Progress in Gynecology*, Dr. J. H. Eastland, Mineral Wells; *Pituitrin*, Drs. I. D. Russell, Petrolia, and R. A. Duncan of Graham; *Treatment of Eclampsia*, Dr. H. H. Key, Jacksboro; *Uterine Hemorrhage, With Reference to Its Occurrence in Renal Cirrhosis*, Dr. Chas. H. McCollum, Fort Worth. Dr. McCollum discussed those cases of uterine hemorrhage in which profuse bleeding was seen, yet when the uterus was removed it seemed to be normal. Such cases he thought due to renal cirrhosis. Dr. Bacon Saunders

said that Dr. McCollum had "stirred up something" and advised him to keep on in his research.

Vaccine Therapy, Dr. T. C. Terrell, Fort Worth; *Hexamethylanamine in Diseases of the Ear, Nose and Throat*, Dr. C. B. Williams, Mineral Wells.

The following were elected officers for the coming year: President, Dr. J. H. Eastland, Mineral Wells; vice-president, Dr. C. F. Young, Bowie; secretary, Dr. R. A. Duncan, Graham. Mineral Wells was selected as the next meeting place, October 12-13, 1915.

This was the largest meeting in the history of the society; over 200 were present.

NORTHERN DISTRICT—No. 14.

Dr. A. W. Carnes, Hutchins, Councilor.

District Society—R. W. Baird, Dallas, President; Dr. H. L. Moore, Dallas, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Collin—Dr. B. F. Largent, McKinney; 1st Tuesday.
Cooke—Dr. J. R. Lewis, Gainesville; 2nd Tuesday.
Dallas—Dr. R. S. Loving, Dallas; 2nd and 4th Thursdays.
Delta—Dr. C. C. Taylor, Cooper; 1st Monday.
Denton—Dr. W. C. Kimbrough, Denton; Tuesday following 1st Monday.
Ellis—Dr. E. F. Gough, Waxahachie; 2nd Tuesday.
Fannin—Dr. E. H. H. Foster, Bonham; 2nd Thursday monthly.
Grayson—Dr. Davis Spangler, Sherman; 1st Tuesday.
Hopkins—Dr. J. H. Holbrook, Sulphur Springs; 1st Wednesday.
Hunt—Dr. M. L. Wilbanks, Greenville; 2nd Tuesday.
Kaufman—Dr. B. J. Hubbard, Kaufman; 1st Tuesday, February, April, June, August, October and December.
Lamar—Dr. W. W. Fitzpatrick, Paris; 1st Thursday.
Montague—Dr. C. F. Young, Bowie; 2nd Tuesday monthly.
Tarrant—Dr. J. J. Richardson, Fort Worth; 1st and 3rd Fridays.
Van Zandt—Dr. D. L. Sanders, Wills Point; 1st Friday.
Wise—Dr. L. H. Reeves, Decatur; 3rd Tuesday each month.

THE DALLAS COUNTY MEDICAL SOCIETY met April 22. Owing to the inclement weather the attendance was very small. There being no quorum, the meeting of the Executive Body was not held. Several applications and communications were deferred until the next meeting. No cases were reported. Dr. J. H. Black presented a paper on *The Serum Reaction in Pregnancy*, which was very much appreciated, and discussed by those present.

THE DALLAS COUNTY MEDICAL SOCIETY met May 27th. Dr. Bruce reported a case of death soon after an injury to the head, received while in a debauch. A medico-legal question was raised as to whether death was due to the injury or to the effect of aspirin and trional administered immediately after the injury. The report was discussed by Drs. Gilbert, Baker, Carnes and Wilkinson, who agreed that the amount of the drug given was not enough to be held responsible for death.

Prof. Louis Rosenburg read a paper on *The Relation Between Physiological Effect and Chemical Constitution.* The paper was illustrated by drawings and models which, with the clear and interesting manner in which the subject was presented, afforded an excellent insight into the manner in which the synthetical preparations are worked out. The paper was discussed by several, and the reader given a vote of thanks by the society.

The following were elected to membership: Drs. J. T. Downs, Dallas, C. M. Jackson of Rockwall, G. T. Parks of Lancaster and R. E. L. Mewshaw of Tate.

THE DALLAS COUNTY MEDICAL SOCIETY met June 10th. Dr. L. F. Bland reported an interesting case of tuberculous meningitis, in which life was sustained nine hours before death by use of the pulmotor. The case was discussed by Drs. Worley and Turner. Dr. A. B. Small presented a most instructive report of the removal of two intestinal tumors, one malignant and the other benign, in which Lane's operation was done, with good recovery in both cases. The reports were amplified by stereopticon views showing the anatomy and technique. Dr. J. H. Dorman read a paper on *Puerperal Eclampsia*, in which he reported results in seven cases treated. This paper was discussed by Drs. Smart, Moore, Marchman, Baker, Loving and Whitaker.

Several applications for membership were referred to the Board of Censors.

THE FANNIN COUNTY MEDICAL SOCIETY met May 13th, at Bonham. The following program was rendered: *Diagnosis and Treatment of Psoriasis*, Dr. H. H. Leeman; *Etiology and Treatment of Urticaria*, Dr. C. C. Adair; *Diagnosis and Differentiation of Eczema*, Dr. W. Y. Ward; *Treatment in General Skin Diseases*, Dr. O. C. Nevill.

THE HUNT COUNTY MEDICAL SOCIETY met in regular session in Greenville, May 11.

Dr. W. P. Dunbar, Campbell, read a paper on *Pellagra* bringing out some suggestive ideas as to etiology. He suggests that the cause is the introduction of some microorganism, as yet unknown, into the mouth, affecting the mucous membrane of the whole alimentary tract. The first manifestation of the disease is a sensation of heat in the mouth and stomach; the tongue is coated centrally and red and smooth at the tip and the edges, with general redness of the mucous membrane, with vesiculation or even superficial ulceration. Whatever the microorganism may be, it seems to have an affinity for nerve food. Some have reported excellent results, if not complete cures, from emetine. This would suggest that the disease might be of an amoebic origin.

Among those who have treated the disease with some degree of relief, it is found that many remedies have been used, such as arsenic in some form, with most marked results, and this seems to hold the center of the stage in the matter of treatment. Salvarsan, neosalvarsan, cacodylate of soda, quinine hydrobromate, the citrous fruits and fruit juices, are some of the favorite remedies.

Dr. E. M. Price, Gainesville, read a paper on *The Etiology of Pellagra and Source of Infection.* Garden soil may be the means of the spread of the disease, particularly if it is of amoebic or parasitic origin. The Wassermann reaction is positive in most cases. Various preparations of arsenic are employed with marked success in many forms of pellagra, syphilis and malaria; arsenic is a paraciticide in the blood. Pellagra is a disease of place. For centuries it remains in one locality; foci once established remain in the temperate and torrid zones around the world. There is a similar spread of hookworm disease. Hookworm disease was once considered in the same way as pellagra now is. Pellagra is a rural disease stopping at the city gate. It is found in communities that pollute the soil; it works in the day and not at night. Eight females in this country are affected to one male. In Europe, where men and women go to the field, both are about the same. Dr. Goldberger says we do not have pellagra in the navy or army, unless the army has been exposed to polluted soil. The bed bug, the buffalo gnat and various flies, are variously blamed as being the means of the spread of the disease.

Dr. C. E. Cantrell raised the question of a permanent meeting place, and the President and Secretary were instructed to secure a place.

On motion of Dr. Joe Becton, all visiting physicians were accorded the privilege of the floor.

Clinics of pellagra were presented by Dr. M. L. Wilbanks. Pursuant to motion, Dr. Joe Becton read Dr. Palmer's article on *Pellagra* in *The Journal of the A. M. A.* Papers and clinics were discussed by Drs. E. F. Wright, C. E. Cantrell, W. C. Welch, A.

B. Moore, J. W. Benton, G. C. Richards, Roseborough, Joe Becton, M. L. Wilbanks, C. T. Kennedy, C. L. Gregory, E. M. Parrish and W. P. Dunbar.

Joint meeting with the Collin County Medical Society was decided upon and was left to the program committee.

A vote of thanks was tendered the program committee for the excellent programs for the past four months.

Members present: Drs. C. G. Allen, Joe Becton, J. W. Benton, H. M. Bradford, C. E. Cantrell, M. M. Chandler, W. M. Dickens, W. P. Dunbar, J. H. French, C. L. Gregory, C. T. Kennedy, H. E. King, R. G. Landers, T. J. Milner, A. B. Moore, A. C. Prather, J. S. Stidham, W. C. Welch, M. L. Wilbanks, J. W. Ward, E. F. Wright and Drs. E. Mack Parrish, Gainesville, E. T. Roseborough, Marshall, Carroll Pounders, Hillsboro, G. C. Richards, W. E. Pennington, S. G. Gains and W. L. Yarborough (dentist,) Greenville, visiting.

The Kaufman County Medical Society met in Terrell, June 1, with 20 members and five visitors present. Dr. A. W. Carnes, Councilor, and Dr. C. M. Grigsby of Dallas, were visitors.

The morning session was taken up with discussions of cases reported, in which diagnoses were asked for and treatment mentioned. These discussions were of interest.

Dr. W. H. Monday had invited the society to take luncheon with him at his home, and a most delightful time was the result. Seven addresses were made during the course of the luncheon, on subjects pertaining to the work of the physician, which, together with the menu, made truly a feast for mind, body and soul. At the close, Dr. W. J. Pollard, in behalf of the society, presented Dr. Monday with a thirty dollar gold headed cane, suitably engraved, as a token of the love and respect which the society holds for him. Dr. Monday is 71 years old and has been in active practice in the county for 42 years, and is an enthusiastic, regular attendant at society meetings. His years rest lightly upon him.

In the afternoon, Dr. Carnes delivered an address; Dr. Grigsby gave a splendid lecture on *Cardiovascular Renal Diseases*, and Dr. Jarmon read a paper on *Syphilis and the General Practitioner*. These papers were appreciated because they were practical and instructive.

Next meeting will be held at Mabank, August 3.

The Tarrant County Medical Society met at the Arlington Heights Sanitarium, June 4th. The scientific program was arranged by the sanitarium staff, and the social features of the evening were conducted by the ladies, and consisted of music and refreshments. The following clinical cases were shown:

Dr. Wilmer Allison presented a young man suffering with general paresis. Complete history and treatment of the case were given.

Dr. J. D. Bozeman and Dr. Bruce Allison each presented patients suffering with pellagra, and with general paresis.

The Tarrant County Medical Society held its second regular monthly meeting, June 18th. The following program was arranged and conducted by Dr. P. F. Higgins: *Chronic Otitis Media; Operation and Complication*, Dr. R. H. Gough; *Osteosarcoma of the Inferior Maxillary*, Dr. Geo. D. Bond; *Fifth Return of Sarcoma of the Thigh*, Dr. Bond; *Results of a Badly Lacerated Hand*, Dr. J. A. Gracey; *Double Potts' Fracture Complicated by Morphinism*, Dr. W. C. Rountree; *Brain Tumor*, Dr. R. B. Sellers; *Report of Case of Unusual Growth in the Posterior Vaginal Wall*, Dr. J. B. Shannon; *Report of Case of Pancreatic Cyst*, Dr. Chas. H. Harris.

NORTHEASTERN DISTRICT—No. 15.
Dr. W. H. Blythe, Mt. Pleasant, Councilor.

District Society—Dr. C. A. Smith, Texarkana, President; Dr. J. N. White, Texarkana, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bowie—Dr. E. M. Watts, Texarkana; 4th Friday.
Camp—Dr. R. Y. Lacy, Pittsburg; 1st Wednesday.
Cass—Dr. J. T. Herndon, Linden; 1st Wednesday.
Franklin—Dr. Z. C. Fuquay, Mount Vernon; 1st Tuesday.
Gregg—Dr. W. D. Northcutt, Secretary.
Harrison—Dr. J. B. Baldwin, Marshall; 1st Tuesday.
Marion—Dr. S. A. Miller, Jefferson; 1st Thursday monthly.
Morris—Dr. R. C. Farrier, Omaha; 1st Tuesday quarterly.
Titus—Dr. W. H. Blythe, Mount Pleasant; 2nd Tuesday.
Upshur—Dr. T. S. Ragland, Gilmer; 2nd Tuesday.
Wood—Dr. V. E. Robbins, Quitman; last Friday monthly.

The Titus County Medical Society met May 11th, at Mount Pleasant. Drs. Smith, Taylor, Johnson, Grissom, Broadstreet, Crabtree and Blythe, were present. Dr. Taylor presented a clinic, which was very interesting and elicited considerable discussion. A communication from the American Red Cross Society was read. After considering the matter for a short time, a motion was made and passed, to pigeon-hole it indefinitely. Dr. Grissom, delegate to the State Association, made an interesting report of the Fort Worth meeting. Dr. Smith reported a case of malarial haematuria in a young man.

The Titus County Medical Society met in Mount Pleasant, June 8th. Those present were Drs. Smith, Jackson, Broadstreet, Fleming, Grissom, Miller, Rountree and Blythe. Dr. Fleming reported a case of pellagra, which was discussed at length. Dr. Davis of the State Hookworm Commission, was a visitor, and gave a very interesting talk on *Hookworm*, accompanied by demonstrations with the microscope. He was given a vote of thanks for his lecture. Dr. Broadstreet reported a very interesting clinic.

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

W. H. Hargis, President.....San Antonio.
W. H. Blythe, Vice-President.....Mt. Pleasant.
H. L. Wilder, Secretary-Treasurer.....Glen Rose.

CHANGES OF ADDRESS.

Dr. Jas. T. Mann, from Fugua to Brownsdel.
Dr. Jas. T. Mann, from Fuqua to Brownsdel.
Dr. B. F. Smith, from Hillsboro to Galveston.
Dr. E. P. Davis, from Houston to San Angelo.
Dr. C. P. Schenck, from Temple to Waco.
Dr. J. S. Richardson, from Omaha to Naples.
Dr. W. C. Weir, from Quilla to Oenaville.
Dr. T. J. Laird, from Dublin to Lorenzo.
Dr. C. C. Berry, from San Antonio to San Saba.
Dr. R. G. Davenport, from San Antonio to Snyder
Dr. W. E. Herrin, from San Angelo to Miles.
Dr. L. P. Tenney, from Troup to Itasca.
Dr. P. W. Pearson, from Emory to Terrell.
Dr. C. W. Castner, from Lavon to Terrell
Dr. F. E. Young, from San Antonio to West Point.
Dr. A. M. Horner, from Laredo to El Paso.
Dr. Joe Miles, from New Baden to Franklin.
Dr. Joseph Ponder, from Kemp to Sebree.
Dr. W. D. Brown, from Silsbee to Fuqua.
Dr. J. B. Turner, from Lovelady to Carmona.
Dr. J. E. Ellis, from Westville to Houston

NEW MEMBERS STATE MEDICAL ASSOCIATION OF TEXAS TO JULY 1.

Anderson County—Thos. Freundlich, Palestine; F. N. Haggard, Palestine; G. R. Howard, Palestine; E. V. Converse, Palestine.

Angelina County—R. B. Forrest, Huntington; C. B.

Stewart, Huntington; G. B. Wood, Huntington; L. H. Denman, Lufkin; B. F. Currie, Burke; H. L. McCall, Pollock; J. L. Beasley, Pollock.

Atascosa County—L. S. Johnson, Jourdanton.

Austin County—C. J. Schramm, Fayetteville.

Bastrop County—C. H. Castner, Smithville; F. J. Kraulik, Smithville.

Bee County—N. H. Bowman, Beeville; W. O. Brown, Beeville; W. C. Haynes, Beeville; J. B. Hunter, Skidmore; A. O. Hull, Beeville; C. W. Irion, Mineral; H. E. Luehrs, Mathis; A. J. Turner, Beeville.

Bell County—J. W. Ellis, Killeen; J. G. Jenkins, Temple; V. P. Randolph, Walburg; R. R. Curtis, Rogers; D. W. Queen, Temple.

Bexar County—R. S. Adams, San Antonio; S. G. Aldape, San Antonio; J. F. Beckmeyer, San Antonio; W. F. Bonner, San Antonio; David Cerne, San Antonio; J. E. Coyle, San Antonio; A. M. Davidson, San Antonio; J. T. Deacon, San Antonio; W. H. Doty, San Antonio; Conrad Frey, San Antonio; W. T. Harris, San Antonio; J. B. Johnson, San Antonio; L. E. McAdon, San Antonio; J. L. Mitchell, San Antonio; F. H. Redmond, San Antonio; T. W. Robertson, San Antonio; Thad Shaw, San Antonio; W. L. Starnes, San Antonio; G. P. Stokes, San Antonio; E. M. Sykes, San Antonio; M. W. Wooten, San Antonio; H. O. Wyneken, San Antonio; J. M. Postell, San Antonio.

Bosque County—T. C. Coston, Womack; A. N. Pike, Iredell.

Bowie County—L. J. Kosminsky, Texarkana; J. L. Lightfoot, Texarkana; P. M. Payne, Red Water; A. L. Peterson, Texarkana; H. R. Webster, Texarkana.

Brazos County—G. L. Rea, Bryan.

Brazoria County—G. F. Fausett, Freeport.

Brown County—H. C. Eargle, Brownwood; J. N. Nichols, Bangs; F. H. Rosebrough, Brownwood; E. T. Sonendriker, Bangs; A. L. Taylor, Brownwood; R. L. Cobble, Zephyr; H. C. Morris, Brownwood; H. F. Crandall, Zephyr.

Burleson County—T. L. Goodnight, Caldwell.

Burnet County—J. L. Williamson, Burnet.

Caldwell County—J. M. Watkins, Luling.

Cameron County—O. V. Lawrence, Brownsville; A. Pumerajo, Brownsville; B. O. Works, Brownsville.

Cass County—J. H. Herndon, Linden; C. F. Sheppard, Bivins; W. T. Stovall, Linden.

Cherokee County—W. P. Barron, Rusk; J. N. Bone, Jacksonville; J. T. Greenwood, Lone Star; E. E. Guinn, Jacksonville; M. E. McClure, Alto; S. S. Rather, Jacksonville; W. H. Sory, Jacksonville.

Childress County—J. W. Albert, Childress.

Clay County—L. F. Crook, Bellevue; Albert Greer, Henrietta; C. E. Shackelford, Henrietta; B. M. Puckett, Henrietta.

Collin County—T. G. Boorman, Celina; P. F. Brooks, Wylie; B. M. Bristo, Westminister; C. W. Castner, Terrell; W. J. Davis, Anna; I. L. Maxwell, Wylie; M. S. Metz, McKinney; R. E. Morrow, Lucus; T. O. Staples, Wylie; W. F. Wolford, Allen; E. S. Blythe, Allen.

Collingsworth County—E. W. Jones, Dodsonville.

Coleman County—J. W. James, Talpa; J. B. Pentacost, Glen Cove; S. H. Spruiell, Gold Busk.

Comal County—W. M. Barron, Blanco; R. Wright, New Braunfels.

Comanche County—P. G. Hays, Sidney; J. E. Self, DeLeon.

Cooke County—J. W. Palmer, Sivell's Bend.

Dallas County—Wm. Hale, Dallas; A. F. Jones, Mesquite; C. L. Johnson, Dallas; S. R. Milliken, Dallas; Thos. Purser, Dallas; J. H. Smart, Dallas; G. T. Smith, Dallas; C. H. Standifer, Dallas; H. L. Whitaker, Dallas; J. W. Doughty, Dallas; G. L. Carlisle, Dallas; C. M. Jackson, Rockwall; R. E. L. Mewshaw, Fate; G. T. Parks, Lancaster; J. T. Downs, Dallas; P. E. McChesney, Dallas; H. H. Hendricks, Dallas.

Denton County—W. C. Jasper, Denton; S. P. Odell, Stony; J. E Stover, Little Elm; D. G. Taylor, Garza.

DeWitt County—K. D. Curtis, Cuero; W. S. Hastings, Cuero; Jeremiah Ward, Jr., Nopal; J. F. Duncan, Yoakum; W. H. Holland, Goliad.

Eastland County—G. T. Blackwell, Gorman; W. H. Guy, Carbon; C. B. Leggett, Gorman; J. M. Nicks, Ranger; A. J. Parks, Eastland; F. D. Shepherd, Eastland; B. F. Terry, Rising Star; J. W. Howell, Lyra.

Ellis County—H. W. Aldridge, Manitowoc, Wis.; W. E. Campbell, Ennis; J. E. Jones, Boyce; R. R. Ransport, Waxahachie; C. E. Gray, Ennis.

El Paso County—H. O. Darnall, El Paso; J. C. Darracott, Marfa; N. D. Frazin, El Paso; T. W. Grace, El Paso; S. M Haffner, El Paso; D. H. Huffaker, El Paso; D. Rodarte, El Paso; W. R. Smith, El Paso; E. Stadelman, Long Beach, Cal.; A. A. Freedman, El Paso; H. V. Jackson, El Paso; C. J. B. Saxton, El Paso.

Erath County—D. H. Dorsett, Thurber; T. M. Greenwood, Bluffdale; W. C. Murray, Alexander; O. H. Shepard, Morgan Mill; R. D. Chunn, Lingleville.

Falls County—W. H. Allen, Marlin.

Fannin County—R. C. Davis, Bonham; S. H. Fulton, Ladonia; S. B. Nelson, Ladonia.

Fayette County—R. H. Knolle, LaGrange; J. W. Smith, La Grange; O. J. Crow, Muldoon.

Foard County—C. A. Cantrell, Truscott; R. E. Main, Thalia.

Fort Bend—W. H. Minton, Missouri City.

Franklin County—H. E. Chandler, Mt. Vernon; Geo. Stephens, Mt. Vernon; F. O. Taylor, Mt. Vernon.

Freestone County—J. D. Davidson, Donie; J. E. Johnson, Mexia; F. P. Peyton, Teague; W. A. Suttle, Freestone; J. W. Bond, Donie.

Galveston County—B. L. Arms, Galveston; W. R. Cooke, Galveston; G. H. Fahring, Anahuac; C. F. Fowler, Galveston; M. F. Kreisle, Galveston; E. V. Powell, Galveston; D. P. Wall, Galveston; W. C. Wright, Galveston.

Gonzales County—A. B. Pharr, Gonzales.

Grayson County—J. W. Bounds, Gunter; H. L. Brown, Sherman; L. C. Ellis, Denison; A. B. Gardner, Denison; D. M. Hestand, Tom Bean; M. M. Morrison, Denison.

Gregg County—L. D. Stansberry, Longview.

Navasota County—A. D. McAlpine, Navasota; D. L. Peeples, Navasota; M. J. Quinn, Iola.

Guadalupe County—M. B. Brandenburg, Seguin.

Hall County—P. L. Vardy, Estelline; V. V. Clark, Estelline; A. L. Johnson, Newlin.

Hamilton County—W. T. Balding, Hamilton; O. J. Colwick, Cranfills Gap; P. C. Pluenneke, Cranfills Gap; M. M. Risinger, Chalk Mountain.

Hardeman County—G. W. Carter, Quanah; R. R. McDaniel, Quanah; T. M. Young, Chillicothe; Frank Stone, Dumont.

Harris County—P. M. Archer, Houston; W. H. Bennett, Humble; C. P. Brokaw, Houston; C. M. Campbell, Houston; J. E. Clark, Houston; B. F. Coop, Houston; Ray K. Dailey, Houston; G. S. McGinnis, Houston; C. W. Stephenson, Houston; W. B. Eckhardt, Houston; G. F. Parkhill, Houston.

Harrison County—G. D. McMahon, Blocker.

Hays County—Ernest Boston, San Marcos; J. A. Wall, San Marcos; M. C. Van De Venter, San Marcos; E. Beall, San Marcos.

Hemphill-Roberts-Lipscomb-Ochiltree County—S. C. Lee, Glazier.

Henderson County—W. W. Beach, Malakoff; Wm. Richardson, Athens; A. C. Horton, Murchison.

Hidalgo County—A. J. J. Austin, Los Ebanos; J. M. Doss, Donna; W. A. Graham, McAllen; A. M. Horner, Laredo; W. C. Johnson, Pharr; W. N. McGee, McAllen; J. H. Phillips, McAllen; T. M. Shelton, Rio Grande; W. H. Bennett, Falfurrias; W. P. Woodall, Hidalgo.

Hill County—L. Barnes, Hubbard; R. R. Carpenter, Malone; C. D. Cupp, Hillsboro; T. R. Dean, Whitney; J. B. Dunn, Hubbard; J. H. Hendrix, Bynum; A. J. Lingo, Whitney; L. C. Roberts, Malone; J. B. Webb, Abbott; H. E. Hoke, Hubbard; M. L. Robinson, Hubbard.

Hood-Somervell County—F. A. Collins, Acton; W. F. Perkins, Tolar.

Hopkins County—E. E. Addy, Reiley Springs; J. P. Dickerson, Sulphur Springs; J. J. Johnson, Sulphur Springs; O. Smith, Cumby; W. A. Tucker, Peerless; A. B. Worsham, Brashear.

Houston County—J. B. Turner, Jr., Lovelady.

Hunt County—C. G. Allen, Campbell; W. B. DeJernett, Commerce; Emmett Goode, Quinlan; G. W. Holderness, Commerce; M. S. Howell, Merit; P. W. Pearson, Terrell; A. C. Prather, Greenville; R. S. Reiff, Floyd; J. W. Swindell, Greenville; J. W. Ward, Greenville; W. J. Wheeler, Commerce; E. R. Shuford, Wolfe City; G. B. Norris, Celeste; P. S. Pearson, Celeste; R. B. Smith, Quinlan.

Jack County—F. G. Huckaby, Jacksboro; E. Hughes, Bryson; H. H. Key, Jacksboro; T. C. McCloud, Jermyn; B. L. McCloud, Bryson; G. B. Wade, Jacksboro; L. A. Winstead, Jermyn; L. B. Woods, Jacksboro; D. R. Woods, Perrin.

Jasper-Newton County—B. E. Selman, Browndel; J. T. Isles, Remlig.

Jefferson County—C. A. Cobb, Beaumont; J. C. Falvey, Beaumont.

Jim Wells County—E. E. Collins, Premont.

Johnson County—C. C. Anderson, Venus; J. M. Blackwell, Godley; F. D. Cooke, Alvarado; W. D. Fountain, Saratoga; A. D. Yater, Cleburne; T. F. Yater, Godley; L. A. Colquitt, Rio Vista; J. P. Lee, Venus.

Jones County—J. D. Davis, Austin.

Kaufman County—J. A. Couch, Crandall.

Kerr-Kendall-Gillespie-Bandera County—J. M. Adams, Medina City; J. M. Rappold, Bandera.

Kleburg County—C. E. Drake, Kingsville; H. N. Graves, Kingsville; Eusebia Guajardo, Kingsville; W. S. Huffman, Kingsville; J. H. Shelton, Kingsville.

Knox-Haskell County—D. L. Cummins, Haskell; W. H. Dunn, Rochester; T. S. Edwards, Knox City; W. P. Farrington, Munday; J. E. Hammond, Munday; M. M. Hart, Vera; W. A. Kimbrough, Haskell; W. T. Miller, Rochester; W. E. Payne, O'Brien; J. B. Robertson, Munday; A. A. Smith, Munday; L. F. Taylor, Haskell; W. P. Pope, Knox City.

Lamar County—E. P. Edwards, Paris; S. H. Grant, Deport; S. A. McCuistion, Pattonville; Joseph Meyer, Paris; J. D. Skidmore, Biardstown; L. B. Stephens, Biardstown.

LaSalle-Frio County—J. N. Lightsey, Cotulla; L. Wm. Terry, Dilley.

Lavaca County—E. A. Evans, Hope; P. A. Ramsel, Shiner; T. J. Hill, Yoakum; Ament, Victoria.
Lee County—R. H. Womack, Lexington.
Leon County—H. A. Briggs, Buffalo; J. P. Woods, Buffalo.
Lubbock-Crosby County—E. H. Inmon, Lubbock.
McCulloch County—J. W. Matlock, Rochelle.
McLennan County—I. F. Cannon, Mart; L. H. Roddy, Waco; A. R. Schreier, West; Lena Schreier, West; Aleck Spencer, Waco; J. B. Young, Waco; S. E. Ballard, Waco; C. W. Davis, Waco; O. C. Elliott, Elm Mott; E. D. Hodges, Waco; W. F. Shipp, Lorena; C. E. Smith, Mart; J. E. Cooke, Mart; J. D. Lovelace, Speegieville; C. R. McCauley, Moody; J. H. Thomas, West; H. F. Blailock, McGregor; J. J. Dean, Waco; S. R. Jones, Waco; W. L. Jennings, Mart; J. R. Maxfield, Waco; B. H. Rand, Bruceville; L. R. Herrington, Reisel; E. Toomin, Waco.
Marion County—S. A. Miller, Jefferson.
Matagorda County—C. P. Jones, Bay City.
Medina County—G. S. Woods, Devine.
Menard-Kimble County—J. A. Leggett, Menard.
Mitchell-Nolan County—W. E. Burk, Sweetwater; Q. A. Griffin, Sweetwater; C. A. Rosebrough, Sweetwater.
Montague County—T. B. Lofling, Montague; L. E. Petty, Forestburg.
Montgomery County— W. D. Morris, Conroe.
Nacogdoches County—J. B. Deal, Nacogdoches; W. T. Castleberry, Alazan.
Navarro County—O. C. Bowmer, Rice; J. T. Carter, Rice; J. S. Daniel, Corsicana; J. A. Jones, Corsicana; H. R. McMullan, Roane; W. H. Walker, Winkler; G. M. Liddell, Purdon; W. J. Baze, Barry.
Nueces County—H. R. Giles, Corpus Christi; J. H. Grant, Corpus Christi; P. Martinez, Corpus Christi; C. Williams, Bishop.
Orange County—J. P. Hewson, Orange.
Panola County—C. F. Hull, Carthage.
Parker-Palo Pinto County—W. H. Baldridge, Mingus; W. S. Baldwin, Mineral Wells; I. F. Houx, Gordon; J. N. Mincey, Mineral Wells; W. M. Thomas, Mineral Wells; H. P. Whatley, Mineral Wells; M. Thompson, Brock.
Polk County—T. H. Bates, Camden; H. S. Denham, Livingston; F. B. Handley, Hortense; B. C. Marsh, Livingston; U. H. Shine, Leggett; R. P. Stewart, Corrigan; P. W. Weeks, Benford; S. E. Wisdom, Onalaska.
Potter County—A. E. Barrett, Pampa; W. H. Flamm, Amarillo; E. T. Lawler, Amarillo; R. L. Vinyard, Amarillo; W. A. Carroll, Claude; S. M. Henry, Groom.
Runnels County—W. W. Mitchell, Norton; F. M. Hale, Ballinger.
Rusk County—C. A. Deason, Kilgore; J. G. Motley, Overton; Irving Parish, Tatum; J. H. Spivey, Henderson.
Sabine County—W. C. Arthur, Bronson; J. C. Fortenberry, Brookland; R. L. Damsdell, San Augustine; H. T. White, Geneva; C. F. Smith, Hemphill.
San Patricio County—C. O. Watson, Corpus Christi; W. B. Guinn, Trivoli; I. S. Rogers, Woodsboro; J. D. Carpenter, Refugio.
Scurry-Kent-Dickens County—T. D. Holder, Hermleigh; J. O. Lane, Fluvanna; D. C. Williams, Post.
Shelby County—T. G. Calhoun, Teneha; E. B. Clements, Timpson; D. C. Clements, Timpson; F. O. Johnson, Timpson; J. G. Rushing, Center.
Stephens County—A. T. Lyday, Eolian.
Smith County—C. B. Clark, Troup.
Tarrant County—J. H. Cadenhead, Fort Worth; Chas. Carter, Fort Worth; A. C. Daves, Fort Worth; T. L. Goodman, Fort Worth; J. A. Hammock, Kennedale; P. K. Lipps, Fort Worth; L. F. Rhodes, Tarrant; F. G. Sheddan, Fort Worth; H. W. G. Shytles, Fort Worth; T. C. Terrell, Fort Worth; Webb Walker, Fort Worth; E. C. Axtell, Fort Worth.
Taylor County—S. M. Alexander, Abilene; J. H. Warnicke, Abilene.
Throckmorton County—J. E. King, Throckmorton.
Titus County—R. E. L. Burrus, Winfield; W. A. Jackson, Talco.
Tom Green County—J. D. Gowan, Christovol; C. R. Gowan, Sterling City; G. T. Janes, San Angelo; G. L. Lewis, San Angelo; J. R. Rickman, Carlsbad; S. E. Thompson, Carlsbad; R. R. Longino, Fort Stockton; M. L. Turney, Fort Stockton.
Travis County—J. W. Bradfield, Austin; R. L. Davis, Austin; J. F. Gullett, Austin; C. A. Mathews, Austin; E. B. Taylor, Manor; C. B. Weller, Austin.
Trinity County—M. C. Poston, Crete.
Tyler County—L. R. Cade, Chester; C. S. Coker, Chester; R. E. Dicken, Woodville; B. L. Jordan, Colmesneil; J. T. Shivers, Woodville; J. H. Thomas, Doucette.
Upshur County—J. G. Eastham, Pritchett; Chas. Rogers, Rosewood; G. A. Taylor, Bettie.
Uvalde-Edward County—E. T. Hughes, Uvalde; J. R. Mahon, Sabinal; H. A. West, Leaky; Paul Cook, Uvalde.
Van Zandt County—W. C. Hearin, Canton; E. Blankenship, Wills Point; A. J. Kellam, Canton.
Val Verde County—Ivy Stansill, Sanderson.
Victoria-Calhoun County—W. O. Cloud, DaCosta; L. W. Chilton, Goliad; J. M. Yarbrough, Goliad.
Webb County—H. M. Austin, Laredo.
Wharton-Jackson County—T. L. Davidson, East Bernard; N. H. Wireback, Iago.
Wichita County—G. W. Bolin, Charlie; C. A. Cates, Petrolia; Q. B. Lee, Wichita Falls; C. D. Lindley, Archer City; T. H. Parmley, Electra; A. T. Reed, Byers; J. F. Reed, Wichita Falls; L. X. Koons, Wichita Falls.
Williamson County—W. H. Atkinson, Florence; J. L. Boyd, Taylor; R. H. Crockett, Hutto; J. W. Hale, Weir; Y. F. Hopkins, Thrall; Wm. Schultz, Georgetown.
Wilbarger County—T. O. King, Harrold; R. C. Shanks, Tolbert.
Wilson County—W. J. Hutchinson, Poth; R. G. Martin, Lavernia; J. E. Sparks, Floresville.
Wood County—P. M. Eakes, Winnsboro; W. M. Meadows, Como.
Young County—H. E. McKinney, Olney; R. L. McCoy, Megargle; H. D. Vaughter, Megargle; W. T. Webb, Megargle; G. B. Hamilton, Olney.

SECRETARY'S REPORT, STATE ASSOCIATION OF COUNTY SECRETARIES, 1914-15.

The name of this organization was handed down to me as the "State Association of County Secretaries." The constitution provides that the name be known as the "State Association of Medical Secretaries of Texas." No revision of the constitution is found. There is an error somewhere.

No records or books have been turned over to me, nor can any trace of such property be found. Some few times the minutes have been recorded in the State Medical Journal, but no official books are to be had. A set of books should be procured, a book for the minutes and a ledger for the accounts. The minutes and statements are present on paper, as the secretary has used his personal ledger to keep the accounts.

Effort has been made to arouse the interest of the principal officers of the State Medical Association, especially the councilors, who could add materially to the enthusiasm of the county societies in this organization.

Effort was made to have the societies pay the expenses of their secretaries, in part or wholly, to the Annual Session of the State Association. Neuces, Bexar and El Paso counties, which are, by the way, the most distant, responded promptly through the influence of their councilors.

Your secretary feels that he has made a failure in obtaining members and arousing interest among the secretaries. The following are the members, fifty in number, a percentage of 35.7:

Burnett County, Dr. H. S. Garrett; El Paso County, Dr. C. F. Braden; Lee County, Dr. C. M. Jones; Childress County, Dr. F. B. Bryan; Fannin County, Dr. E. H. H. Foster; Williamson County, Dr. F. G. Pettus; Hunt County, Dr. M. L. Wilbanks; Karnes County, Dr. R. C. Youngblood; Hale-Swisher County, Dr. E. F. McClendon; Lamar County, Dr. W. W. Fitzpatrick; DeWitt County, Dr. B. J. Nowierski; Coryell County, Dr. Ed. Graves; Hemphill-Roberts-Lipscomb-Ochiltree, Dr. H. C. Caylor; Neuces County, Dr. A. W. Davisson; Eastland County, Dr. W. P. Lee; Montague County, Dr. C. F. Young; Kerr-Kendall-Gillespie-Bandera County, Dr. Wm. Lee Secor; Brown County, Dr. H. C. Eargle; Potter County, Dr. J. J. Crume; Austin County, Dr. Otto E. Steck; Ellis County, Dr. E. F. Gough; Bexar County, Dr. W. H. Hargis; Gonzales County, Dr. W. F. Dunning; Fort Bend County, Dr. R. M. Munroe; Victoria-Calhoun County, Dr. F. L. Sargeant; Harris County, Dr. B. T. Van Zant; Dallas County, Dr. R. S. Loving, LaSelle-Frio County, Dr. R. L. Graham; Mitchell-Nolan County, Dr. T. J. Ratliff; Coleman County, Dr. R. Bailey; Burleson County, Dr. T. L. Goodnight; Polk County, Dr. T. H. Bates; Bowie County, Dr. E. M. Watts; Johnson County, Dr. C. L. Edgar; McLennan County, Dr. D. L. Eastland; Robertson County, Dr. A. J. Sharp; Travis County, Dr. J. C. A. Eckhardt; Hill County, Dr. J

E. Boyd; Falls County, Dr. A. J. Streit; Delta County, Dr. C. C. Taylor; Cooke County, Dr. J. R. Lewis; Lampasas County, Dr. W. D. Francis; Tarrant County, Dr. J. J. Richardson; Wise County, Dr. L. H. Reeves; Parker-Palo Pinto County, Dr. E. A. Davis; Hood-Somervell County, Dr. G. D. Ross; McCulloch County, Dr. J. S. Anderson; Van Zandt County, Dr. D. L. Sanders; Hamilton County, Dr. J. H. Wysong; Wood County, Dr. Virgil E. Robbins.

The financial report is as follows:

August 22nd, 1914, cash from Dr. C. E. Scull	$ 8.50	
April 3rd, 1915, H. L. Wilder check to cover over draft	14.01	
May 3rd, 1915, dues to date	69.00	
	$91.51	
DISBURSEMENTS		
Stamps		$15.65
Stationery		20.00
Buttons for 1914 meeting, at Houston		7.85
Duplicator and express on same		6.25
Telephone account		31.01
Buttons for 1915 meeting, at Fort Worth		7.00
		$87.76
Cash balance on hand		$ 3.75

The large telephone account is due to the fact that notice was given from the State Secretary's office that your secretary had only five days until the program would go to press, and at this time we had only two papers promised. For us to get our program in the JOURNAL, prompt and rapid action was essential. The fault lies with your secretary, who should have begun earlier to arrange the program; and under the circumstances, he is willing to bear the financial loss. The delay was caused by the difficulty of getting the names of the newly elected secretaries.

The duplicator is an instrument to save time and expense, and it is an essential part of the equipment if any amount of correspondence is done.

H. L. WILDER, Secretary-Treasurer.

DEATHS

DR. THOMAS W. NAVE of Galveston, died May 13th, of hemorrhage of the brain. He was a graduate of Tulane Medical College, and was thirty-eight years of age. He had no family, except a wife, who survives him. He was a thorough gentleman, a good and highly respected citizen. He was a member of his county, state and national medical societies, and stood for high ideals in his profession. The Galveston County Medical Society passed appropriate resolutions of regret at his death.

DR. FRANK M. DOUGLASS of Itasca, died at his home, May 17th, of Bright's disease, after an illness of more than two years. He was born at Covington, Hill county, May 24, 1878, and was the son of Dr. A. M. Douglass, one of the best known pioneer doctors of the State, having been a member of the State Senate at one time. Dr. F. M. Douglass was a graduate of Tulane, being a member of the class of 1905. He was an ex-president of the Hill County Medical Society, and was a member of the State Medical Association. He leaves a wife and four brothers, three of whom are physicians. Dr. Douglass was a Mason and was buried by that order. He stood high professionally and socially in the town where he lived.

DR. ABNER M. ANDERSON, Throckmorton, died at Olney, April 26th. He was born at Byrne, Tennessee, October 29th, 1870. Coming to Texas at the age of 26, he settled at Whitewright, where he was married to Miss Willie E. Johns, January 4th, 1898. To this union were born four children. Dr. Anderson studied medicine and graduated in the year 1900. He practiced in the following places: Orangeville, Olney, Alice, Eden and Throckmorton. While living at the last named town, he was stricken with paralysis. Dr. Anderson was a good, faithful Christian, a member of the Methodist Church and a Mason.

DR. C. B. MERCHANT, Quinlan, died at his home, December 28th, 1914, of pneumonia. He was born in Alabama, December 20th, 1861. His literary education was received at the High School of Leesburg, Texas. He graduated from the Medical Department of Tulane University, New Orleans, in 1885. He began the practice of medicine in Hunt County the same year and continued to practice in the same county until his death. He was examiner for several insurance companies. Dr. Merchant was a man of high ideals and was always for any movement that would better his fellow man.

DR. HUGH L. RAY of Poolville, died at the home of his daughter, March 5, 1915, of carcinoma of the liver. He was born July 28, 1835, at Tuscaloosa, Alabama. He graduated in medicine from the University of Nashville about fifty years ago. He practiced in Laudedale county, Alabama, until 1893, when he moved to Poolville, Texas, where he practiced a few years and then retired. He joined the Confderate Army at the beginning of the Civil War and served until its close. He joined the Methodist Church in early life and remained an ardent worker in its ranks until his death. He became a Mason about forty-five years ago. He held several important positions in the order and in the church and always did his part so well that it reflected honor and credit to his life. Dr. Ray was a Southerner of the old style. He always gave much stress to honorable dealings, good morals, and an upright Christian life.

DR. J. A. PIPKIN of Lancaster, was born at Glennville, Arkansas, May 2, 1846. He died at the home of his son, Dr. G. P. Pipkin, March 20, 1915, from diabetic gangrene. He received a high school education, which was followed by a degree in medicine from Tulane University, New Orleans, in the class of 1868. He practiced medicine at Glennville, Arkansas, from 1868 to 1880; at Prescott, Arkansas, 1880 to 1886; at Abilene, Texas, 1886 to 1893; Waco, 1893 to 1907, when he retired from practice. It may be justly said of him that he was a profoundly conscientious physician of the old school. His best service was at the call of rich and poor alike. After his death was found on the fly leaf of an old ledger the motto: "The poor are my best patients; the Lord is their paymaster." He was widely read in medicine, and a keen observer with a marked faculty for correlating clinical observations. He was a great believer in the natural forces of the body, and consequently refused to administer drugs of doubtful curative powers in given cases. He was of the best type of the generation now passing. Of Welsh origin, he was a man of strong convictions. To him the revelation of God in Christ and in his own spiritual experience was no less a reality than the external world. It was in this faith he lived and died.

GEORGE BERRY GRAVES, M. D. of Valentine, died of tuberculosis on June 7th. He was the second son of J. H. and Amanda Cook Graves, and was born near Hurt, Pennsylvania county, Virginia, December 22, 1880. He was reared on his parents' farm, and received instruction from a governess until the age of fourteen. He then went to Pantops Academy and from there to Richmond College, Virginia, for three

years, taking his degree in 1900. He attended the University College of Medicine, Richmond, for three years. He took his degree in medicine and dentistry at the University of the South, Sewanee, Tennessee, in 1904. The same summer he did special work in the Columbia Hospital at Washington, D. C. Dr. Graves was an excellent student, and served as quiz master in chemistry. He assisted his teachers in many ways while a student in Richmond. He was beloved by both teachers and students. He instructed privately a class of fifty students who matriculated for medicine without a college education. After graduation in 1904, he accepted the position of physician and dental surgeon in the collieries of Coalwood, West Virginia. He filled the place creditably until his health gave way in July, 1908. After a few weeks in a Lynchburg Sanitarium he went to Fort Davis, Texas, and after a few months he recovered his health and located at Valentine. Here he built up a large practice and was a division surgeon of the Southern Pacific Railway. He owned a drug store, in addition to his practice. He married Miss Sarah Jenkins, daughter of Judge Jenkins of Waco, June 16, 1910. She and a son four years old, survive him. He was ambitious and labored beyond his strength. His health broke down two years ago. He was a devout Baptist, a Mason, Knight Templar and an Elk. He was buried in Waco.

George Coleman Abell, M. D. of Texarkana, was born in Fluvanora county, Virginia, January 28, 1861. He was the son of Reverend George W. and Mary A. Abell. When quite a small boy his parents moved to Southwest Virginia, where they lived for a few years; from whence his father received a call to the pastorate of the Christian Church of Murfreesboro, Tennessee. He attended the schools of that place, until the death of his father in 1874. Returning to Virginia the following year with his mother, he studied in the schools of Snowville, and then in the Virginia Military Institute, winning honors in the literary and military departments of the latter school. After leaving this school he decided to become a physician and entered the Kentucky Medical College in Louisville, from which he received his degree. He came to Texas in 1885, locating first in Boston, the county seat of Bowie county. He removed to Texarkana in 1892, where he practiced his profession continuously until his death, April 11, 1915.

Doctor Abell was one of the founders of the Pine Street Sanitarium. In 1908 erected the George C. Abell Sanitarium, which he maintained until his death. He always kept abreast with the times. He took several special courses in Tulane University and Post Graduate School of New Orleans, and at one time served as House Surgeon of the Eye- Ear, Nose and Throat Hospital of that place. He attended lectures in New York, Chicago and Rochester, and made two trips to Europe. In August, 1914, he was elected President of The Surgeons Club of Rochester, Minnesota, where he spent a part of his summers for many years.

Doctor Abell was a gentleman of the old school, highly polished and courteous, possessing those manly qualities, both in and out of the medical profession, that won for him many rich rewards in the hearts of his admirers. He was the young physician's friend, and helped many of them over the rough places in their early days of practice. Doctor Abell never married.

The Bowie and the Miller County Medical Societies mourn his loss, as well as the whole of Texarkana and the surrounding territory, as was evidenced by the immense funeral cortege. He was buried under the auspices of the Masons.

BOOK NOTES

Therapeutics of the Gastro-Intestinal Tract. By Dr. Carl Wegele. Adapted and edited, with additions on the diagnosis of the diseases of the oesophagus; diagnosis of the diseases of the gastro-intestinal tract; duodenal tube and its uses; diseases of the pancreas, and *x*-ray examinations of the gastro-intestinal tract, by Maurice H. Gross, M. D., Attending Gastro-Enterologist to the Bar Moriah Hospital, and I. W. Held, M. D., Attending Physician to the Bar Moriah Hospital. With 52 illustrations in the text and 2 figures in colors on one plate. Cloth; 8 vo., 329 pages. New York, Rebman Company, Herald Square Building, 141-145 West 36th Street. $3.00.

The editors of this exceedingly interesting work declare it to have been found most concientious and thorough as a treatise upon the therapy and diagnosis of the diseases of the gastro-intestinal system. The additions and adaptations made by them entitle the work to a first place in the special literature of the day upon one of the important subjects coming to the busy and often dumbfounded doctor, who must deal *ex tempore* with all contingencies; and taken in connection with the work on malignant tumors of the abdominal viscera, by Professor Rudolph Schmidt, Professor of Medicine in the University of Innesbruck, it will afford the busy physician what has not yet been satisfactorily found in the original medical literature of America, an essentially reliable working knowledge of this interesting and vital subject.

Diagnosis of the Malignant Tumors of the Abdominal Viscera. By Professor Rudolph Schmidt, Professor of Medicine in the University of Innesbruck. Authorized English Version by Joseph Burke, Sc. D., M. D., Attending Surgeon, Buffalo Hospital of the Sisters of Charity, Consulting Surgeon, Emergency Hospital, Buffalo, N. Y. 8 vo., cloth, 361 pages. Rebman Company, 141-145 West 36th Street, New York. $4.00.

This work, translated by Dr. Joseph Burke, is one of the most important issues from the press of these very discrete and progressive publishers. The close personal relations existing between the author and translator warrant entire reliance upon the accuracy of the translation.

The subject of malignant new growths stands second in importance to none in the category of medical and surgical interest; and the diagnosis of such growths in the gastro-intestinal tract ranks among the most vital. Professor Schmidt has apparently realized the values of the research he has undertaken, and has acquitted himself with due credit. A careful study of the text of this book will save the medical advisor the embarrassment and the patient the danger, of the too frequent mistakes occurring in this field of brilliant opportunities and splendid accomplishments.

The resources of the laboratory and the clinic have been used in the construction of the text, and no known principle of etiology, symptomatology, diagnosis or therapy, have been forgotten by him. The current efforts at cancer diagnosis have only been acknowledged, without admitting their claims as verified. And, while the author is unwilling to decry any of them he has not considered them of sufficient authenticity to merit the credence implied by their admittance to the text of a dignified treatise, such as Brieger's anti-trypsin determination, Pfeiffer's anaphylaxis test, Ascoli's mejostag-

min reaction, Criel's isolysin demonstration, etc., none of which seem to have realized the hopes of their originators. However, the resources for differential diagnosis have been utilized as far as they bear promise of value.

Too much could hardly be said of the value of this book, and the subscriber will find it amply worth his while to secure a copy. In connection with the foregoing work of Dr. Carl Wegele, it will afford opportunity for study of the anatomy, physiology, pathology and therapy of the alimentary canal and abdominal regions.

CANCER, ITS CAUSE AND TREATMENT, by L. Duncan Bulkley, A. M., M. D., Senior Physician, The New York Skin and Cancer Hospital. 8 vo., cloth, 224 pp. $1.50 net, post paid. Paul B. Hoebler, Medical Publisher, 67-69, East 59th Street, New York. 1915.

Prof. Dr. Bulkley, the author of this well written little volume, was born in 1845, graduated from the College of Physicians and Surgeons, 1869; is Senior Physician at the New York Skin and Cancer Hospital, established 1882, with a capacity of 57 beds, which have since been increased to 100. The author is, therefore, 70 years of age. A ripe age, as the saying goes; but with the doctor's views upon the surgical treatment of cancer, and in view of the opinions of tireless researchers who have toiled in the laboratories of the younger, rational learning, where the secrets of biologic, bio-chemic processes have yielded their old strongholds to the better equipped analytic genius of the heir of all ills, a question of expediency arises. Is it better to follow the one acknowledged means of safely combatting this insidious foe to man, or shall we temporize with means of more doubtful value? Early diagnosis and prompt surgical interference, is at least safe procedure.

In his preface, Dr. Bulkley says, "Cancer has hitherto been regarded almost wholly from its histological and surgical aspects; * * * although voices have been raised from time to time, with more or less force, all joining in the same plea that the basic cause of the disease lies in some derangement in the vital forces of the organism, as influenced largely by diet and mode of life." In the next paragraph he pleads for a view of the subject "from a broader aspect, and by synthesis and deduction to seek to understand some of the underlying causes of malignant disease also, to see if some general principles could not be ascertained upon which could be based an explanation of the views he had long held, and of the practice which he had long followed in regard to the prevention and cure of this dire malady." Synthesis, as we understand it, means the masterly control of the elements or materials proposed for building up the compound, while deduction would mean the facile reckoning of the exact values of all component elements, implying minute knowledge that would exclude the possible occult. Such analysis and synthesis would surely reveal the underlying and other causes of malignancy, and the "general principles" could be applied with usual success when done in order.

Though the author speaks largely of "the laboratory," and of "science," he seems to do so with the dubious evasions of the physician of former times. He does not seem to realize that there are, really, no more general principles in the *rationale* of modern medicine; that the one principle now paramount in all is the *specific*. Empiricism has scored some splendid works, such as the discovery of cinchona, etc. The same year that Weichselbaum discovered the Diplococcus meningitidis intracellularis, Gower described, with striking exactitude, the pathology of the disease, remarking that its cause would be yet isolated. Coleman, in 1898, declared yellow fever "a Nemesis, an agent of retributive justice," in the hand of God; then, that it is a specific disease, always identical in every climate, possessing a germ capable of transportation and reproduction, never contagious but highly infectious, limited to two stages of reproduction. This was, perhaps, the last word of empiricism, and just before the Yellow Fever Commission announced the discovery of the mode of transmission and infection of that hitherto mysterious and wasting pestilence.

May it soon be said of the astute and scholarly but fallacious book of Dr. Bulkley, that it was the last scintillation in the sombre shades where earnest men sought in the night time of ignorance for the truth of cancer.

Dr. Bulkley charges that both ante and post operative care and treatment in surgical cases are sadly neglected. Inquiry among local surgeons of wide experience and the highest qualifications, has shown that this accusation is only true of the patient who is referred to them for the operative treatment and passes out and back to the medical attendant, or to himself in the foolish belief that when the neoplasm is removed there need be no further attention given to the matter. Each surgeon interviewed declared he always tried to impress upon the patient the weighty importance of the after treatment. So the charge rests upon the failure of the patient to heed wholesome advice from the surgeon.

The doctor again says, "Too often when a cancer is suspected or discovered, it is taken as a foregone conclusion that the malady is hopeless, except as the disease, that is, the new growth, may be removed by the knife, *x*-ray, radium, caustics, etc. And after a surgical operation, as far as my observation goes, the patients are invariably left entirely to their own resources, with the hope, alas, too often futile, that the tumor will not regrow, but with no attempt to so guide the life that there shall not be the same tendency to a recurrent malignant new-formation. Against the latter course I also raise my earnest protest."

BOOKS RECEIVED.

Transactions of the College of Physicians, Philadelphia.

Surgery of the Blood Vessels. *J. Shelton Horsley.* (C. V. Mosby Co.)

Infection and Immunity. *Charles E. Simon.* (Lee and Febiger.)

Pyelography. *Braash.* (W. B. Saunders Co.)

Diseases of Children. *Ruhrah.* (W. B. Saunders Co.)

John B. Murphy's Clinics, Vol 4, No. 2. (W. B. Saunders Co.)

Limitation of Offspring. *Robinson.* (Critic & Guide Pub. Co.)

Pyorrhea Alveolaris. *Bass and Johns.* (W. B. Saunders Co.)

Diseases of the Digestive Organs. *Aaron.* (Lea and Febiger.)

Practical Medicine Series 1915. General Surgery, Vol. II. *Murphy.*

International Clinics, Vol. II, 25th Series. (Lippincott.)

Principles of Bacteriology. *Abbott.* (Lea and Febiger.)

International Medicine. *Farr.* (Lea and Febiger.)

Treatment of Gonorrhea. *Robinson.* (Critic & Guide Pub. Co.)

Eye, Ear, Nose and Throat. *Wood.* (Anderson and Ballinger.)

Practical Medicine Series, Vol. III, 1915.

Modern Medicine, Vol. VI. *Osler-McCrae.* (Lea and Febiger.)

Texas State Journal of Medicine

HOLMAN TAYLOR, EDITOR-IN-CHIEF.
EDITORIAL OFFICE: Western National Bank Building, Fort Worth, Texas.

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VOL. XI. AUGUST, 1915 No. 4

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

THE PELLAGRA SITUATION.

We have no occasion at the present time to change our (editorial) estimate of the pellagra situation of August and November of last year. However, the contents of the present number of the JOURNAL make the subject again appropriate, and our readers will forbear if we reiterate somewhat. The report of our committee on the study of pellagra, presented in the form of a discussion of a separate phase of the situation by each member of the Committee, before a general session of the Association, will be found in the pages immediately following, except for the report on the epidemiology of the disease, which has not come to hand. This paper will be presented at another time. A careful study of this report, together with the other very excellent material published in conjunction therewith, develops the fact that there is yet no definite conclusion as to either the cause or the treatment of the disease. That our knowledge of the disease and experience in its treatment, is extending rapidly, however, cannot be denied and the wide range and scope of investigation at present being prosecuted leads us to hope for an early consensus of opinion, if not proof, as to both. We will continue to look to such agencies as the Thompson-McFadden Commission, the United States Public Health Service, Rockefellow Institute and the like, but we must not underestimate the value of observations made at the bedside by the every-day, practicing physician. Among these there are, of course, many possessing educational qualifications and of the highest scientific attainment, and many who may be said to be little better than neighborhood nurses, and who are deficient in both; but some of these may have developed a shrewdness of observation most helpful if properly utilized. It is up to us as a profession to gather all manner of observation and opinions, and run them through the crucible of science.

Our State is at this time probably the most promising field for research work in pellagra, having been recently invaded, and presenting all stages of the disease. While the main incentive for research work is the good that may be done for suffering humanity, it must not be forgotten that lasting fame will come to the individual who may contribute materially to the discovery of the positive factor, as well as to his associates in the work and his fellows at large. The Tri-State (Ark., La. and Tex.) Medical Society has offered a series of medals for the best contributions in the way of research work, and probably the originators of the idea had in mind the possibilities in this direction. The State Medical Association of Texas will probably continue to prosecute its studies of the disease through its own committee, and the Dallas Medical and Surgical Society has recently appointed a large and well selected commission, likewise for the study of pellagra. The latter commission is expected to report during the meeting of the Southern Medical Association in Dallas, this fall. Altogether, we have a most excellent opportunity of contributing materially to the relief of the pellagra situation.

Opinions differ widely as to the prevalence of pellagra in Texas, and it is unfortunate that we are not able to gather reliable statistics in this particular. It is probable, and certainly possible, that quite a few of the cases denominated pellagra are misdiagnosed. On the other

hand, it is possible that many cases of pellagra are not diagnosed at all, and either get well spontaneously, as a result of treatment symptomatically administered, or die as the result of complications so severe as to obscure the original disease. It is clear, therefore, that any effort to establish the exact number of cases in the State would be extremely difficult, and it may be sufficient for the occasion to assume that thousands of cases exist in this State. The death rate, officially reported to the State Health Department, during the months of June and July, 1914, was 38 and 48, respectively. During May, June and July of this year, there have been 79, 90 and 79, respectively.

As to etiology, opinions continue to differ mainly as to whether the disease is infectious or the result of faulty diet. Evidence is gradually but surely accumulating in support of both theories. There is, however, no conclusive proof and there is still much room for conjecture. We will not attempt to discuss the argument advanced in support of either theory. On the one hand, conditions are pointed out which make it seem impossible for the disease to be of infectious origin, and which would seem to point conclusively to the unbalanced diet theory as answering more nearly the requirements of scientific proof; on the other hand, it is pointed out with equal surety that the disease exists extensively and under circumstances differing in no particular from those which have existed for years, as relates to food, and that the epidemiologic features clearly point to the gradual spread of an infection. Nor has the maize theory been abandoned. In addition to spoiled corn, many foods poisonous in themselves or capable of harboring a poison, have been charged with responsibility for the existence of pellagra. Notable among these, and of unusual interest, is the claim made by Dr. Blosser of Atlanta, Georgia, that certain sugar-cane products are highly toxic and capable of producing symptoms in the lower animals very similar to those of pellagra in the human. It is not claimed that this poison is the exclusive source of pellagra, but of 133 patients Dr. Blosser found that all but three had been free users of sugar-cane products, and that upon the exclusion of sugar-cane and its products, 121 of these were cured. Also, it is claimed that there has been no recurrence where this particular food product has been excluded from the diet subsequently. Dr. Blosser succeeded in killing a dog by the administration of a small quantity of sugar-cane syrup daily for several months, with no other alteration in the diet. He recounts his observations in the *Southern Medical Journal* for January, 1915. It will be recalled that at one time claims very similar to these were made for cotton-seed oil, concerning which very little has been heard of late.

Several investigators have claimed to have discovered the micro-organism which causes the disease, and considerable unsupported proof has been offered in support of their contentions. Among these may be mentioned our own fellow physician, Dr. Meredith of Wichita Falls, who is prosecuting his studies with all possible vigor, and who hopes to offer irrefutable proof in the near future. Pizzoni, an Italian investigator, continues to support his contention that he has isolated an organism which he has named *Streptobacillus pellagra.* He is a strong zeist, and contends that the infection comes from corn, although he admits that persons who do not eat this grain are sometimes infected. He has made many cultural studies of this particular micro-organism, and states that it is remarkably polymorphic, assuming numerous forms under changed biologic conditions. *The Journal of the American Medical Association* speaks editorially of his claims in the June 5th, 1915, number, and has the following to say in regard thereto:

> "His observations remain, however, practically unconfirmed, and, whatever be the individual opinion as to the cause of pellagra, his presentation of the matter is not likely to meet approval in this country. Leaving aside the lack of any confirmation of his work and the very remarkable pleomorphism of the micro-organism he describes, his writing displays an effort to create harmony between laboratory results and clinical and epidemiologic facts—harmony too perfect, too beautiful and too soul-satisfying. Such beautiful harmony is rarely realized in actual conditions, and its presence would, in the minds of the wary, be far more likely to produce skepticism than conviction."

If it transpires that the disease is either infectious or parasitic in character, it will doubtless be proven that the principal source of infection is in or about the home, and in all probability, as contended by a number of ob-

servers, the soil will be found to be the medium which harbors the causative factor. The close analogy between pellagra and hookworm, from an epidemiologic standpoint, is striking, and all but convincing.

In view of the uncertainty as to etiology, it is not at all surprising that treatment should vary widely; and, as usual clinical evidence is abundant and convincing in support of any treatment of sufficient plausibility to engage the enthusiasm of its advocates. As a matter of fact, and as has been frequently observed, the disease is one essentially of spontaneous recovery. If the cause lies in the pituitary gland, as has been urged, or if it is a disease of the central nervous system, as has likewise been claimed, it is easy to understand how a variety of treatment may be equally effective. Good nursing and careful, scientific management, including, of course, a well balanced diet, will contribute materially to the successful application of any remedy whatsoever. In addition to the hitherto favorite arsenic compounds, such as cacodylate of soda, the use of picric acid has received much consideration, at least in Texas. Clinical reports are extremely flattering, and one observer has stated that the remedy is as much a specific in this disease as quinine is in malaria. The theory of its action is not fully explained, and its use seems to have had its origin in the well known and beneficial effects of picric acid in the treatment of burns. Another suggestion by a Texas physician has been widely commented upon—the auto serum treatment, in which the serum from a blister intentionally produced on the patient, is returned to the circulation hypodermically. Favorable reports have been advanced in support of this treatment. In this particular, as in the matter of etiology, the profession will continue to maintain a judicial attitude, and will continue to apply the rule of reason and the well known laws of science, and much common sense, to all the newer ideas, and will continue to treat pellagra according to individual indications.

VIOLATING THE SACRED PRECINCTS OF MATERNITY FOR COMMERCIAL PURPOSES.

We doubt very much whether even the shrewdly devised and elaborate exploitation of the so-called "Twilight Sleep" would have been effective except for the catchy title. It is true that the appeal was directed to a credulous public and a rather numerous class, which has for a long time been seeking to evade not only the pain incident to a natural process, but the subsequent responsibility as well. It would seem that the limit of indelicacy had been reached when a reputable magazine with a wide circulation and going into the innermost precincts of the best homes of this country, filled its pages with suggestive literature, covering a subject which should be reserved for private conferences between mother and daughter, and father and son, but it has come to pass, and the wonder grows as we contemplate the deed, that this sacred subject has been exploited further through the medium of moving picture shows, with the concomitant widespread and ill advised advertising necessary to attract patronage. Dr. Kurt E. Schlossingk, announced as a disciple of Frieburg, whose coming was prophesied by *McClure's, Ladies' World, Metropolitan,* and various newspapers, at the time "twilight sleep" was being so vigorously presented to pregnant mothers and *others,* recently toured the country with a series of films purporting to show the contrast between child birth under ordinary circumstances and under the scopolamin-morphin anethesia methods presumed to have been devised in Freiburg and at the present time being tried out in this country. The Chicago Medical Society entertained the gentleman in question as a guest of honor at a symposium on this form of anesthesia. Subsequently he returned with the films above referred to, and considerable advertising was resorted to. He was denied the use of the public show houses by the censor board. We do not know whether other censor boards were equal to the occasion, but it is quite evident that many of them were not sufficiently informed or had not the authority to prevent this imposition on common decency and the proprieties.

These pictures were presumed to have been shown under the auspices of the so-called "Mothers' League." The Editor of the *Texas Courier-Record of Medicine* interviewed the gentleman during his stay in Fort Worth, and he said in answer to the question as to what the Mothers' League consisted of, that it consisted of women and was organized in New York about a year ago. He did not say how

many members there were. He did say, however, in effect, that the whole thing was devised by him in an effort to support himself in this country while the war was preventing his return to his own. It is said that the pictures are unscientific in general and very crudely arranged, and are at the same time a disappointment to those who expected to see an accurate portrayal of the method in question and those who simply expected to see something immodest and unclean. A correspondent in the *Waco Morning News* of July 12, 1915, makes the following very pertinent criticism:

"As the wife of a physician, and a mother, I visited a local theatre a few days ago to hear the lecture on 'Twilight Sleep,' purporting to be under the auspices of the 'Motherhood Educational Society.' The lecture was delivered by a foreigner in broken English, his style of presentation was disgustingly flippant, producing upon a certain element of his audience a like attitude which appeared to me most unbecoming and which the subject was far from warranting. His frequent attacks upon the medical profession were cunning and well planned and he made many claims which can not be proven, among others, that 90 per cent of maternity cases so treated were successful. Then followed a screen presentation in which the manner of procedure in administering hypodermically, the drug scopolamin was shown.

"I question the propriety, the decency even, of an organization of women violating through the agency of films and for commercial purposes the precincts of maternity. How far will the new art of the photoplay go that it must needs bring to an intrusively curious audience the holy things of life? If such be considered necessary to the advancement of science, then present it to physicians, and exclude the general public, especially seekers after sensation, the morbidly curious and young girls.

"Mrs. T. M. B."

THE ATTITUDE OF THE MEDICAL PROFESSION TOWARDS "TWILIGHT SLEEP."

It seems that the lay press is not more than half impressed by the lesson of the Friedmann fiasco of a short while ago, and again the medical profession is misunderstood. When the much heralded Friedmann treatment was under discussion, the doctors were roundly censured for their attitude of suspicion and misapprehension. It was freely charged that the source of the discredit so freely heaped upon this wonderful remedy, this acme of scientific effort, was professional jealousy. Subsequently, when it was clear even to the commercial interests of the country and that portion of the public press subservient thereto, that the whole business was a colossal fraud and a crime against humanity, the acknowledgment of the justice of the position assumed by the medical profession was only half hearted. Now, because the medical profession has undertaken conscientiously to try out and estimate the value of the wonderful "Twilight Sleep," despite its unfortunate exploitation, it is assumed that the treatment is a wonderful thing, something new to the medical profession and certain of universal adoption in scientific circles. On the other hand, the ill results following its use and the consequent adverse criticism of the medical press, has met with the same old charge of ill-advised resentment over the breach of a nonsensical code of medical ethics. The *San Antonio Light* of September 27, 1914, hailing the advent of this treatment as a marvelous invention and wonderful development, comments upon the attitude of the medical profession as follows:

"The medical fraternity of this country is most conservative; it is extraordinarily cautious in accepting Europe's claims. American physicians seem to be gifted with intuitive power in passing judgment upon the discoveries that the old world is wont to offer the new. Dr. Friedmann's alleged cure for tuberculosis was branded by the medical fraternity of the United States as a 'fake' almost before the obscure German physician had been given an opportunity to explain his treatment in this country. To many laymen, the indisposition of American physicians to permit Dr. Friedmann to practice his treatment on patients here—patients, it must be admitted however, who in probably the majority had not reached the hopeless stage—seemed almost unjust. It was even charged that American physicians were actuated by motives of jealousy. How the American physicians arrive at their quick, their finally hasty conclusions has never been explained to the laity, but circumstances surrounding that and similar cases would now seem to make all the more significant the immediate reception of the 'Twilight Sleep' treatment by medical men of this country."

Of course, there is no intention to do the medical profession discredit, either on the part of the *Light* or any other reputable lay publication. It is unfortunate that those newspapers which desire to give the public the very best, the latest and most accurate news on the medical discoveries and advancement of the times, do not secure the services of reputable scientific physicians to edit all such matter.

Now, what is the attitude of the medical pro-

fession on this subject? The treatment is not new, except, perhaps, in some part of the technic. The principles involved are well understood by the medical profession, and to some extent the practice has been useful. However, there are many and rather obvious reasons why the treatment may not become universal, and why it is not the panacea so eagerly sought by pregnant women. The effort is directed solely to the relief of pain, and the treatment is sought by the laity for that reason alone. The element of danger to mother and child is considered only in relation to this object. That there are dangers, many of them, must be readily recognized by any physician who has had considerable experience in the practice of obstetrics. *The Journal of the American Medical Association,* May 22, 1915, contains two very excellent, conservative articles on the subject, a careful reading of which will convince any physician that the treatment is to be used with extreme caution, and that it is not the simple, harmless procedure anticipated by the laity and the public press. In one of these articles, sixty cases are reported, twenty-six of which were denominated as not successful; seven, little successful; eight, partial success; five, fair success; eight, good success, and in six, the treatment was completely successful. The average duration of the treatment exceeded that of a year previous in the same number of cases, by about seven hours. In twenty-six cases, memory remained throughout labor, and thirty-nine were cloudy; but the twenty-six had been given more of the drug than the thirty-nine. Twenty-two complained bitterly of thirst, and headache and vertigo were present in twenty-seven and thirty-one cases respectively. Forty-three patients slept part of the time, and pain was diminished in thirty-nine, absent in one and increased in one. Delirium was present in nine cases. In one case, rupture of the uterus occurred. Perineal tear occurred in twelve cases. Respiration in the baby was spontaneous in forty-six eases and aid was needed in thirteen. One still birth occurred. The symptom most complained of was blurred vision. Two patients had marked delirium for two and four days postpartum, and after-pains were noteworthy in eight cases. Spontaneous delivery of the placenta occurred only twice. The other article referred to was somewhat more hopeful, but still not the unqualified endorsement of the treatment we might expect by so conservative a writer and one evidently anxious to get the best possible results from the treatment. Occasionally an article reporting favorable cases is seen, but for the most part, results are about those here described. On the whole, the medical profession must insist that this matter be left entirely in the hands of those of its number who are giving special study to obstetrics and the public will serve its own ends best by keeping within bounds in discussing such subjects as this, particularly through the lay press.

THE JUDGMENT OF THE PHYSICIAN NOT INHIBITED BY THE HARRISON LAW.

The question as to the right of the practicing physician to prescribe unusual quantities of morphine, for instance, in the case of habitues or incurables, has frequently arisen, and it has recently come to us that certain druggists have refused to fill prescriptions for the drugs prohibited by the Harrison Law, except the purpose for which they are prescribed is clearly stated on the prescription itself. In the Miscellaneous Department of the June, 1915, JOURNAL, we referred to a ruling covering this point, a careful reading of which would set this whole matter right. The Harrison Law does not intend to inhibit the physician in the free exercise of his judgment in any particular, not even as to the administration of opiates and its derivatives. It does intend, however, to prevent the indiscriminate use of these drugs and the inexcusable traffic we know has for so long a time been indulged in, even on the part of certain physicians. The ruling in question simply requires the physician prescribing an unusual quantity of an opiate or cocain, to state the reason for the prescription. If he is treating an habitue, he must so state on his prescription, and in addition the prescription should show, simply as an evidence of good faith, that an effort is being made to bring about a cure by a gradual reduction of the dose; if the prescription is for someone painfully ill of an incurable disease, the prescription should so state. It is not necessary that a diagnosis be made; simply that the statement be made that the patient for whom the drug is prescribed is incurably ill and requires relief. There

certainly can be no objection to either of these requirements. The druggist has a right to protect himself when he believes the interdicted drugs are being illegally prescribed, and he may under those circumstances refuse to fill a prescription; or he may resort to such measures as are necessary to determine whether the transaction is in good faith with the intent of the law. Such procedure would be instituted as a matter of personal protection, and not because of any specific requirement of the law.

The ruling in question was issued by the Commissioner of Internal Revenue, at Washington, under date of May 11, 1915, and may be had upon application to that official.

A TRIP TO THE PACIFIC COAST.

Far be it from us to advise the medical profession to spend its money in riotous living, but if any physician has any money lying around loose, or that is not actually needed for the immediate future, he can do no better with it than to buy a ticket to San Diego and San Francisco, and visit the two great expositions at those places, at the same time getting acquainted with the wonders of the Pacific coast country. In all probability there will not be another exposition comparative to either of these within the next twenty-five years, and many of us will at the expiration of that time be getting a little old for such journeys. The beauties and wonders of the two fairs may not be adequately described, certainly not in a brief reference to the subject, and we must content ourselves with the admonition to go and see. We will be pleased to advise with any of our readers who may desire to take this trip, concerning a number of items the average inexperienced traveler will need to know about, such as routing, stopovers, hotels, etc. There is only one admonition that we feel should by all means be observed: *Visit the San Diego Exposition first.*

THE MATTER OF ATTENDANCE ON THE ANNUAL SESSION.

The Ohio State Medical Journal prints the following pointed and to us most pleasing reference to the matter of attendance on annual sessions:

"We were rejoicing over the splendid record of the Cincinnati meeting when we received a few figures on the recent annual meeting of the Texas State Medical Association. We compared the figures with ours:

	Texas	Ohio
Membership	3,368	3,950
Attendance	1,008	902
Percentage	.30	.24

"Texas with a smaller organization and a greater distance to travel (Texas is almost four times as wide, and over three times as long as Ohio) had a larger attendance than our Association.

"Prior to our meeting we wrote to Dr. Holman Taylor, the Secretary-Editor of the Texas Association, pointing with pride to the excellent results of our One Hundred Per Cent Contests.

" 'We have no use for a one hundred per cent contest,' the doctor replied, 'We have medical defense'."

It may be news to our Ohio brethren that frequently our members are compelled to travel two days and nights in order to reach the place of meeting. Our great difficulty each year is to get a selling date for our tickets to begin early enough for all of our members to reach the place of meeting without beginning so early that it expires before the opening session. If the Ohio profession doesn't appreciate what is being done for it by its Secretary and its most excellent *Journal,* it is indeed ungrateful. The Secretary is a live one and the *Journal* is without a peer in its class.

THE SOUTHWEST JOURNAL OF MEDICINE AND SURGERY.

The Medical Association of the Southwest at Galveston last year, adopted the then *Oklahoma Medical News Journal* as its official organ, and in the December number of that publication, which in the meantime had changed its name to the above, made the following announcement:

"The utterances of this *Journal* must at all times be such as will not bring reproach and criticism upon the organization which it represents; its advertising columns must at all times be clean and free from not only objectionable advertisements, but even those about which there might even be a question. In doing this the *Journal* has made a great sacrifice, but it has done it cheerfully and does not for one moment wish anyone to understand or think that there has been the least regret, for there has not."

The June number of this publication is before us, and so far as we are able to judge this policy is being carried out to the letter. We find that there are twenty pages of good, clean looking advertising, against twenty-eight pages

of rather questionable advertising in the December number above referred to, and we are of the opinion that the twenty pages of today are better revenue producers than the twenty-eight pages of other days.

We sincerely congratulate the *Southwest Journal of Medicine and Surgery,* and the Medical Association of the Southwest, and wish them both much success and prosperity.

DEPARTMENT OF EXTENSION.

The people of this and other states are so eager for information concerning the various diseases that a demand has grown up for a kind of popular medical literature. To gratify this demand, boards of health, various associations, and even some insurance companies, have issued leaflets and pamphlets to be distributed to the laity.

We believe that it is out of the question for physicians to act as distributors of promiscuous pamphlets, printed by irresponsible parties. Nevertheless, doctors need to resort to the psychology of print in educating their patients. We shall accordingly print each month one or more short articles in non-technical English, and written from the standpoint of the physician. Inasmuch as these articles are for the purpose of extending to the laity the information (and the influence) of the medical profession, they will be published under the heading "Department of Extension." This "extension" idea is quite popular in educational circles. Practically all State Universities have departments designed to carry specialized information to the public. Perhaps the most effective extension work done on behalf of the public health, is that of the A. M. A., United States Public Health Service Society for the Control of Cancer and a few of the State Health Departments. The agricultural and live stock interests of the country bear eloquent testimony as to the effectiveness of such efforts.

Once before we made such an attempt but the promised articles failed to materialize and interest did not seem to warrant the effort and the expenditure of space involved. We now have the first several instalments ready for publication and we trust the supply will be perpetuated and interest revived.

Newspapers and others are invited to republish any of these articles which are deemed worthy. Physicians who have prepared similar short articles on appropriate subjects, are invited to submit them for publication.

CANCER HOSPITAL INVESTIGATED.

Upon request the Judicial Council of the Jackson County Medical Society, in the jurisdiction of which Kansas City is located, investigated the Kansas City Skin and Cancer Hospital and reported favorably thereon. The report of the Committee is most interesting indeed, and points to a situation well worthy of consideration at the hands of the medical profession at this time. The report recites the fact that quacks and charlatans, recognizing the prevalence of certain serious and generally fatal diseases, and fully appreciating the fear and credulity of the ignorant public, have been for some time taking profitable advantage of the situation. As a result, cancer doctors and cancer hospitals are numerous, and but few of them are looked upon with favor by the regular medical profession. The Council deems it essential that special hospitals of this character be established and supported by the regular medical profession, not only in order that the public may be given the treatment required in these unfortunate cases, but that support may be to some extent, at least, withdrawn from the unethical and fraudulent institutions so widely advertised to the public. Dr. Halsey M. Lyle, a member of the Jackson County Medical Society, is in charge of this particular institution, and his county society desires to recommend him and his institution to the medical profession as worthy of support and in contrast to the usual run of cancer hospitals.

The same might be said, with particular force at the present time, when the Harrison Anti-Narcotic law is driving many of our addicts to seek treatment, of the drug cure establishments. It is essential, and we would like to emphasize the point, that we know where the honest, ethical institutions of this character are. The average practicing physician receives almost daily, letters and circulars from individual practitioners and specializing sanitaria, offering unfailing and painless treatment in all cases of addicts, and many of us do not realize the amount of fraud practiced in this class of cases. At least one good guide to ethical institutions, is the advertising section of the JOURNAL.

ORIGINAL ARTICLES

PURIFICATION OF PUBLIC WATER SUPPLIES AND SEWAGE DISPOSAL IN TEXAS.*

BY

JOHN B. HAWLEY,

President Texas Association of Members American Society of Civil Engineers.

FORT WORTH, TEXAS.

PURIFICATION OF WATER SUPPLIES.

With rare exceptions, the towns and cities of Texas are furnished, or can be furnished, with adequate supplies of water for domestic, public and industrial uses.

One hundred and eighty-two municipalities of 1,000 or more population have waterworks systems, the remaining 155 securing their water from private wells and cisterns.

Of the 182 waterworks plants, about 85 per cent are municipally owned, the remainder being operated under franchises.

With three exceptions (oil-field towns) all the municipalities without waterworks are under 2,000 population, and the majority of these under 1,500.

There are four sources of supply: (1) Wells, deep, shallow, bored or dug; (2) springs; (3) flowing streams, and (4) waters impounded and stored behind dams.

As well supplies are very generally free from either turbidity or organic contamination, they may be, and are, delivered to the people without filtration or other treatment. Contamination of wells, whether deep or shallow, occasionally happens through infiltration of polluted surface drainage. Frequent laboratory examinations of well supplies should be made, especially in very wet seasons, if perfect safety is to be assured. If such examinations disclose pollution, defects should be remedied, the water sterilized or the supply abandoned. Some of the "deep" wells in Fort Worth were found to be polluted to the extent of 1,000,000 bacteria per c. c., many of them intestinal, during the wet season of 1914. Springs are liable to the same trouble.

All surface supplies are polluted, in greater or less degree, and none is entirely wholesome without filtration or sterilization.

Flowing streams, although more pleasing in appearance, are in general not as safe as stored waters, as the latter are greatly purified by sedimentation (far more in fact than are the flowing streams by oxidation).

Again, most pathogenic bacteria are very short lived in stored surface waters, even the typhoid bacillus, with very rare exceptions, disappearing in twenty to twenty-five days.

The water supply system of a city, with its pumps and distributing pipes, may fairly be likened to the heart and arteries of the human body. If pure blood is pumped through the arteries, the body flourishes. If the blood is bad, the body deteriorates. Medical science has found means to purify the blood. Engineering science, during the present generation, has learned how to absolutely purify the water, on any scale, at minute cost—much less than one cent per thousand gallons.

Two quarts per head is ample "mouth supply," but in order that those two quarts may always be pure, from 50 to 100 gallons, covering all uses, must be purified. Assuming even the higher figure, a modern filtration plant will assure pure water for all uses at a cost of less than 1/10 cent per inhabitant per day. A slang phrase goes, "it looks like 30 cents," conveying the idea of utter insignificance. That is just about what it costs to filter and purify each person's water supply for a whole year.

The Almighty filters our body wastes through the kidneys. Man has devised, in the modern filter, kidneys for our water supplies.

Water filtration, as a developed science, is scarcely thirty-five years old, as "in 1880 only 30,000 people in the United States were served with filtered water, and in 1890 but 5,000 more." (Geo. A. Johnson, 1914.)

The earliest filtration plants, both here and abroad, were of the "slow sand," or English type. These were simply basins about ten feet deep, the lower half of which was filled with clean sand of fine grain. Four or five feet depth of the polluted water was maintained on such beds, through which it filtered at from, say 5,000,000 gallons per acre per day, when clean, down to 1,000,000 when fouled by accumulations of mud and bacteria at and near the surface. Later this process was modified by presedimentation in large basins, sometimes assisted by a coagulant. When too great accumulations of silt and filth clogged the sand surface, the filter was laid out of service, emptied, and a thin layer of sand, about an inch, together with the accumulated matter, removed, when the bed was restored to service. The removed sand was stacked aside, washed and re-used later on after repeated scrapings had too greatly thinned the beds. Excellent results, in the removal of bacteria, were generally achieved by these filters, but turbid waters soon clogged them, rendering necessary too frequent cleaning. Detailed performance and efficiencies will be given further on.

The first "rapid sand," or American type of filter, was installed in 1885, and in 1900 1,500,000 people were being served by them. This process comprises, first, coagulation;

*Read by invitation before the Section on State Medicine and Public Hygiene, State Medical Association of Texas, Fort Worth, May 6, 1915.

second, sedimentation, third, filtration through sand beds of scientifically designed depth and grain; fourth, sterilization, by "hypochlorite of lime" or liquified chlorine (Nascent oxygen, liberated by the reactions following dosing with "hypo" or chlorine, is the real sterilizing agent).

The capacity of "rapid sand" filters is far greater than in the case of the "slow sand" type, reaching 120,000,000 gallons per day per acre of beds, thirty to fifty times the "slow sand" rate.

Each day, or oftener, if necessary (the period varying with turbidity of the raw water), the sand beds are agitated by jets of compressed air applied at the bottom, and then thoroughly washed with pure water from below, floating off the accumulated mud and bacteria to the sewers. No sand is lost in the washing process, as the wash water is applied at a velocity just sufficient to carry off the filth, but not the filter sand. After washing and resumption of operation, the filtered water is for several minutes run into the sewers, in order to insure removal of any stray bacteria.

To make assurance doubly sure, the filtered water is sterilized by a minute dose of "hypochlorite of lime," or liquid chlorine. Few guilty microbes can escape.

To make the whole process clear, let us assume a river water whose turbidity, or mud content, is 1,000 parts per million, which is pretty "roily" water. There will probably be 10,000 bacteria of all sorts in each cubic centimeter, or say 50,000 per teaspoonful, and each cubic centimeter will contain at least one colon bacillus, indicating fecal, and possibly typhoid contamination.

Add a dilute solution of aluminum sulphate, in such quantity as to dose the water at the rate of one grain per gallon. The alum, on meeting the alkalies of the water (nearly all surface waters bearing enough alkalies for the reaction) is changed from sulphate to the flocculent, gelatinous hydrate, sticky and utterly insoluble. Each flake of this sticky "floc" apprehends and holds fast to the mud particles and bacteria in its downward path, and a large percentage of these clusters settle to the bottom of the sedimentation basin during, say, three hours. Those which fail to settle pass to the sand beds, there to be caught and held, with their burden of mud and bacteria until washed to the sewers; nothing but limpid "crystal-pure" water goes through the sand, and if it should tear off and carry with it a "maverick" microbe, the "hypo" reaction would eliminate him.

Two quarts of the assumed raw water would have given a person drinking it 64/1000 of an ounce of mud, and 20,000,000 bacteria, more than 2,000 of which were intestinal; but, after this simple, sane, rational filtration process, the two quarts would contain absolutely no mud and practically no bacteria; and, furthermore, no alum, as that changed to jelly and was caught by the sand. (In the output of even a reasonably well run filter plant you couldn't find a trace of alum by the most delicate chemical test if you boiled ten million gallons down to a drop.) By the way, Elisha, in Kings II:2, 19, coagulated his water supply with salt.

The whole process is so beautiful in its simplicity and efficiency as to make us engineers stare open-mouthed on your Ehrlichs, Kochs and Bealls, with their postulated "ambiceptors" and "fixations of the complement."

Again, incidentally, if the water happens to be hard, even though it be so full of carbonates and sulphates of lime and magnesia, that one feels like biting it off in chunks, another fraction of a cent per thousand gallons will soften it to the housewife's satisfaction, and leave no trace of the chemicals that did the work.

Your profession, the purest, most altruistic and philanthropic, and least paid of us all, with your combined research and cumulative knowledge, is continually raising the life limit of mankind; still, as individuals, you labor under the handicap of treating but one patient at a time. Your judgment is life or death to him. We, the engineers, must handle "the great sources of power in Nature for the use and benefit of Man," in crowds, by communities.

Bad water, bad health for a whole city.

Bad sewerage, increased death rate per thousand.

You and we should, in general and particular, earnestly and heartily co-operate. Engineering schools of the first magnitude are prescribing, in increasing degree, chemistry, histology, bacteriology and epidemology as prerequisites to graduation. Your schools insist on all these, but fail in giving courses on their application to water filtration, garbage destruction and sewage disposal.

Two years ago a committee of physicians was appointed by the Tarrant County Medical Society to inspect and report upon the 6,000,000 gallon filtration plant of the Fort Worth Waterworks. After careful investigation the committee reported, in substance, that results of filtration were practically perfect. They seemed astounded, however, that such showings were made so simply and economically. Not one of them had theretofore, more than vaguely, known what "modern filtration" is doing. Every physician should know. When you have dug into it, and found it your helper, insist that your city shall install it.

As to cost of installation.—A city, under water meters, of

5,000 people generally uses	250,000 gal. per day.
10,000 people generally uses	600,000 gal. per day.
20,000 people generally uses	1,500,000 gal. per day.
40,000 people generally uses	3,000,000 gal. per day.
100,000 people generally uses	10,000,000 gal. per day.

A filtration plant for

250,000 gallons per day will cost about	$ 7,500.00
600,000 gallons per day will cost about	14,000.00
1,500,000 gallons per day will cost about	25,000.00
3,000,000 gallons per day will cost about	45,000.00
10,000,000 gallons per day will cost about	120,000.00

or from $1.13 to $1.50 per head of population.

Interest and sinking fund on, say, $1.35, at 7%, is in round numbers, 10 cents per year. Cost of operation, say, 30 cents per head per year, or a total of 40 cents.

The typhoid death rate, per annum, has been cut from 81 to 22 by "slow sand," and from 44 to 16, per 100,000 population, by "rapid sand" filtration.

Assume a town of 20,000 people using unfiltered water, and with typhoid deaths 10, quite low. Filter the water. Typhoid deaths, 3. "Water saved lives," 7. Economic saving at $3,000 per life, $21,000.

Cost of filter plant for the year, including interest, sinking fund and operation, $8,000, a saving to the community of $13,000.

The case for filtration is made so clearly that argument is unnecessary; and yet, our beloved State has but nine modern filtration plants, serving something like 250,000, or 6 per cent, of our people.

There are also several plain "coagulation-sedimentation" plants, without filter beds, and a few pressure filters in Texas. The former give something like 60 per cent bacterial purification, and the latter results approaching the "rapid sand" type.

Finally, in the whole United States, 18,000,000 people of the 100,000,000 are being served filtered water; 18 per cent, as against 6 per cent in Texas.

Let Texas get busy.

SEWAGE DISPOSAL.

No animal can live when too closely surrounded by its own bodily wastes. A great public servant named Moses apprehended this fact and instructed the "chosen people" in the elements of waste disposal. If you have happened to overlook his instructions, read your Bible again, Deuteronomy, XXIII.

Not only can one not survive contact with his wastes, but he has no natural right to pass them on to his neighbor. The Legislature of Texas, with great wisdom, has provided that municipalities shall not dump their filth into water courses. Nearly half our States have similar laws. Our pollution law, while falling somewhat short of those of several other States, gives the Texas State Board of Health power to insist that streams shall not be polluted by any town, to the detriment of its neighbor further down.

Like water filtration, the science of sewage disposal has seen its greatest development during the past thirty years. During those years it has come to pass that filth laden and disease saturated sewage may be rendered innocuous at surprisingly low cost.

There are several methods, or processes, of sewage disposal, or purification, the principal ones being:

(1) By Dilution.—If the sewage effluent of a municipality be discharged into a stream of comparatively clear water, whose volume is at all times from 60 to 100 times that of the sewage, the oxygen dissolved in the stream water will largely destroy the organic matter of the sewage, bacteria and all, without nuisance being created. Gross particles are usually screened out before passing the sewage to the stream.

There is an old saying that "flowing water purifies itself in sixteen miles." This is not precisely true, but has some basis of fact. All depends on the relative volumes of stream flow and sewage, and the oxygen content.

(2) Broad Irrigation.—In this process the sewage, after screening, is distributed over properly graded and drained lands and used as irrigation water for crops, generally forage. After the water has partially disappeared in vegetal growth and evaporation, the remainder passes into the earth and drains off through gravel strata or otherwise, greatly purified and usually innocuous.

(3) Intermittent Sand Filtration.—Where natural fields of quite sandy loam are at hand, the sewage, screened and perhaps sedimentated, is run onto carefully graded sand plots by means of "shallow-buried" tiles with open joints, the lines of which gridiron the area. The plots are subdrained by tiles similarly distributed, at a depth of 3 or 4 feet below the surface, leading to a final collecting effluent pipe. Beds must be in multiple, at least in duplicate, so as to allow rest and aeration for one while the other is at work. Very high degrees of purification may be obtained by such treatment, if intelligently operated.

In both broad irrigation and intermittent filtration, aerobic bacteria in the soil accomplished the purification.

(4) Contact Beds.—In this process, sewage which has been screened and sedimented, is run into beds 3 to 5 feet deep, of cleaned crushed stone, hard coal, coke, slag or bricks, and allowed to remain in the interstices of such material until aerobic bacteria have converted its organic content to harmless

mineral compounds. The effluent from such beds (if they are properly operated) will be free from offense and non-putrescible. Beds must be used alternately to permit aeration during the resting period.

(5) Trickling or Percolating Beds.—These differ from contact beds mainly in the method of applying the screened and sedimented sewage. (Depth of crushed stone is greater, generally 5 to 7 feet.) Sewage is applied by spraying or sprinkling onto the surface of the beds, allowing it to trickle slowly through the mass of rock or other fragments upon whose surfaces aerobic bacterial colonies have developed, these causing the destruction of organic matter and its change to mineral compounds. Neither of these types are filters in the true sense of the word. Filters are *strainers,* while these rock beds bear interstices almost large enough to permit mice to crawl through. Bacteria do the work.

Like contact beds, percolating beds, scientifically operated, produce non-putrescible effluents.

(6) Chemical Precipitation.—The solids in sewage are sometimes, more especially in England, precipitated chemically, with iron or aluminum sulphate and lime in the form of "milk of lime." The reaction of these forms a heavy precipitate of the hydrate of iron or aluminum (the "floc" mentioned in rapid sand water filtration) which carries suspended matter and some bacteria to the bottom. After a period of settlement, the clearer upper liquid is drawn off and passed to the stream, or perhaps treated by contact or trickling beds. Without the latter, chemical precipitation will not produce inoffensive effluents.

In all the processes, except broad irrigation, sterilization by "hypochlorite" or chlorine, may be resorted to.

Septic Processes.—As far back as 1857, Henry Austin, an Englishman, devised a tank quite similar in its essentials to the modern Septic Tank. His main purpose, however, was to catch and retain the solids, leaving the liquid portion free for further treatment. Since then sanitary engineers in many lands, but especially England, Germany and the United States, have worked upon the development of the idea not only to catch but to liquify and change the fecal and other solids in sewage.

Ordinary domestic sewage is very highly charged with bacteria, of many types, 31 species having been identified. (Fuller, 1912.) From 500,000 to 10,000,000 per cubic centimeter are usual numbers. Since the daily feces of an adult man contain on the average 33 *million million* bacteria, the above figures are not startling.

Bacteria, functionally, are divided into two great classes; Anaerobes, which thrive and work only in the absence of oxygen; Aerobes, which thrive and work only in the presence of oxygen, and an intermediate class, Facultative Anaerobes, which may work and thrive under either condition.

All thrive and work best in the dark.

Early in the researches of bacteriologists and sanitary engineers, it was discovered that several species of anaerobic bacteria, if allowed peace, darkness and absence of air, would change and liquify some of the solids in sewage.

Much study and ingenuity was spent in the endeavor to perfect the septic tank, as it came to be called, to where it alone would purify sewage to the point of non-putrescibility. This end has not been attained, but our knowledge of how to use the anaerobe for our purposes has been greatly enhanced. Even today, however, the septic tank, proper, is simply a "glorified cesspool" in which sewage is quietly and darkly contained for some hours, during which time part of its solids settle to the bottom, there to be changed and liquified by the action of anerobic bacteria. This resultant deposit is called "sludge," and at intervals of days, weeks or months it must be removed, buried, dried and burned, used for fertilizer or otherwise disposed of.

The total solids in sewage are much less than commonly imagined. A fair average is about one-tenth of one per cent, by weight, and only a part of this is in the sludge. In American cities, the dried sludge averages about 40 tons per 1,000 inhabitants per annum.

In 1907, Dr. Karl Imhoff installed at Emscher, Germany, a modification of the septic process, which bids fair to supercede the ordinary "one-story" tank. Imhoff's tank has two stories. Screened sewage flows slowly through the upper story (making its passage across in, say, two hours), the rate of flow being so slow as to be almost imperceptible, dropping a large part of its suspended solids to the floor, which is hopper-shaped, ending in a narrow slot. Through this slot the settling solids drop into the cellar, or digestion chamber, there to lie, acted upon by anaerobic bacteria, until greatly changed in character and reduced in bulk. The slot mentioned is so arranged that gases of septic action below cannot rise through it. These gases, nitrogen, marsh-gas and carbonic acid gas, are conducted elsewhere. The well digested "Imhoff" sludge, when removed, is utterly inoffensive.

To illustrate modern sewage disposal, as it will be installed in many Texas towns, let us assume a town of 5,000 inhabitants, with a daily sewage flow of 200,000 gallons. The total solids are 964 parts per million—less than 1/10 of one per cent; 112 parts, or about ⅛ of all solids, are in suspension, the remainder in

solution; bacteria, at 20 degrees centigrade, are about 5,000,000 per cubic centimeter.

The sewage will first be run through a coarse screen to catch rags, sticks, corks, etc., these to be raked off and buried or burned perhaps once a day. Any coarse grit or sand will also be detained in the screening chamber and cleaned out by hand perhaps once a week.

The screened sewage will then flow through the upper chamber of an Imhoff tank, dropping its suspended solids, in its slow two hours of travel, through the slot in the hopper-shaped floor, into the "septic" digestion chamber beneath, there to ferment, and change and compact until the time to "blow it off" onto drying beds, some weeks later. After passing through the upper or settling chamber of the Imhoff, the sewage flows to a small tank, holding, say, 6,000 gallons, equipped with an automatic syphon. Each time this "dosing tank" fills, the syphon acts, and the 6,000 gallon dose is discharged onto a bed of crushed stone, about 50x100 feet in area and six or seven feet in depth, lying near and ten feet below the syphon.

During the course of five or six minutes the sewage, in fountains of spray through fifty sprinkling nozzles, spreads itself over the surface of the stone and trickles and percolates through the six feet to the porous tile bottom, there to be caught and led away by underdrains to the final effluent pipe and then to the creek. This discharge onto the stone beds would happen again in about a half hour, the beds resting and aerating in the meantime. Within less than three hours from the time it entered the disposal plant, the sewage, purified of its filth and most of its bacteria, and now in perfectly harmless, non-putrescible condition, has entered the stream. Do not understand that it would be fit to drink. It would not; but if you chose, it could then be treated by one of the water filtration processes above described, and made fit for all human uses; or, as an additional finishing touch, it might again be settled in a minor sedimentation tank before discharging into the stream.

Returning to the sludge, slowly accumulating in the digestion chamber. At the end of, say, a month, a simple valve on the sludge discharge pipe would be opened, and a brown, creamy, odorless mass would flow out upon a simple bed of sandy gravel, there to dry out until "spadable," when it would be hauled off for fertilizer, buried or burned.

The cost of such a plant would be about $20,000, or $4.00 per capita of population; operating expense, about five hours of a man's time per day.

If a town has sandy flats lying near and below it, it is possible to provide adequate broad irrigation or intermittent sand filtration systems, at a cost of about $2.00 per capita of population.

If the town is so located and its sewage of such character as to require fine screening, Imhoff tanks, sprinkling filters, secondary sedimentation, sterilization and pumping, the per capita cost may reach $6.00. The example above given, a real city recently studied is, therefore, about an average, $4.00 per capita.

Operating expense, based on returns from many disposal plants, vary from about 10 to 50 cents per capita per annum, although a few, using broad irrigation or intermittent sand filtration, are operated as low as 5 cents per head per year.

There are forty-nine cities and towns in Texas which purify their sewage in greater or less degree. (This list includes Dallas and several small towns where the works are under construction, but not in actual use.) Population of the forty-nine towns is about 450,000, 1915 estimate. Total population of the State is 4,200,000. Urban population (towns of 1,000 and over) is 1,630,000. Percentage of urban population using sewage disposal plants, 27.6. (Since disposal statistics are not complete, it will probably be fair to state that 30 per eent of the urban population purify their sewage.)

It has been my endeavor to briefly convey the idea that modern sewage disposal methods are rational, effective and not excessively expensive. If those points are clear, I am well compensated for the effort.

THE DIGESTIVE SYMPTOMS OF PELLAGRA.*

BY

SEALE HARRIS, M. D.,

Professor of Practice of Medicine, University of Alabama, School of Medicine, 1906-1913; Visiting Physician, 1906-1911 and Physician-in-Chief, 1911-1913, Mobile City Hospital; Chairman Section on Medicine, 1907-1908, and Secretary-Treasurer, 1910-1916, Southern Medical Association; Editor-in-Chief, Southern Medical Journal, Etc.

BIRMINGHAM, ALA.

It is the belief in the comparative frequency of the occurrence of pellagra, with but slight or no skin manifestations, in which the symptoms are largely referable to the digestive tract, that makes it appear timely to discuss this phase of a malady that has attracted so much attention since the report in 1907 of the epidemic in the Alabama Insane Hospital in Mobile County.

It is our increasing knowledge of pellagra, with the ability to diagnose the disease in its

*Read by invitation before the General Meeting on Joint Sessions of Scientific Sections, State Medical Association of Texas, Fort Worth, May 5, 1915.

early stages, that is responsible for the reported decrease in the death rate. I believe that as we study the digestive symptoms more we shall diagnose many more of the mild cases, and that we shall, and in a few years, reduce our death rate to at least that reported from certain Italian districts, *i. e.,* less than 4 per cent of those affected.

The importance of the early diagnosis of pellagra is of equal or greater value to the infected patient than the early diagnosis of tuberculosis. It is our ability to diagnose tuberculosis in its incipiency that is largely responsible for the greatly lowered death rate in, and for the cure of many patients afflicted with this disease. The same is probably true of pellagra; while if pellagra is not recognized until the last stage, as in tuberculosis, pathological changes have occurred that make recovery hopeless. The early diagnosis of pellagra will also have much to do with preventing others from becoming infected. While we do not know with absolute certainty the cause of pellagra, a change in diet and an improvement of the hygiene in the homes of pellagrins, and of their neighbors, will certainly decrease the number of those who will become affected.

PELLAGRA PROBABLY PRIMARILY A GASTRO-INTESTINAL INFECTION OR INTOXICATION.

Without going into a discussion of the etiology of pellagra, it seems to me that everything points towards its being a gastro-intestinal intoxication or infection, due to the ingestion of a toxic or infectious agent in food.

We are indebted to Goldberger for stressing the importance of a well balanced diet in the prevention of pellagra. Personally I do not believe that his theories account for the protean symptoms of the disease. The person who has been on an unbalanced diet is poorly nourished and is susceptible to all diseases. The "unbalanced diet" is therefore probably a predisposing cause of pellagra, just as it is in tuberculosis.

H. F. Harris of Atlanta, believes that there are thousands of people all over the country who are suffering from digestive disturbances, which he calls "corn intoxication," due to the ingestion of spoiled maize, that are in reality a very mild form of pellagra.

My experience in a practice in which patients are referred to me for gastro-intestinal disorders, convinces me that there are a great many cases in what some authors call the "prepellagrous" stage that completely recover by leaving corn products from the diet and by improving their hygienic conditions.

IMPORTANCE OF ANAMNESIS.

The anamnesis is of great importance in making a diagnosis of pellagra because of the intermissions, remissions and exacerbations, of the symptoms that characterize the disease. There may be periods of complete euphoria, particularly during the winter, with a history of nervous and digestive attacks of varying degrees of severity in the spring, summer and early fall months. In many cases the dermatitis is slight. I have had a number of confirmed pellagrins deny that they had ever had any eruption—"only a little sunburn on the backs of my hands every spring." I have seen several cases in the exanthematous stage in which a month later it would not be possible to discover any evidences of previous skin lesion. In other cases the digestive symptoms may continue through the winter, with recurrence of dermatitis once or twice a year. In many cases there is no history of eruption at any time, but frequent recurrences of the characteristic digestive symptoms.

SUBJECTIVE SYMPTOMS.

Since in history taking the complaints of the patients are first considered, it seems best to first take up the subjective symptoms as they occur, in their order, throughout the alimentary tract.

Mouth.—The pellagrous patient usually complains of a burning sensation in the mouth, as if scalded from taking very hot coffee or hot water. This may last only a few weeks, during an exacerbation of the other symptoms, or it may be continuous for months or even years. Sometimes there is actual pain, which may be increased by eating, particularly coarse foods or anything hot or cold. Acids also increase the burning. The tongue is frequently sore and the gums may be tender, spongy and bleed easily. Salivation is frequent during the exacerbations and at times is profuse, the saliva dribbling from the mouth continuously. At times the ptyalism and the stomatitis may be so pronounced as to very closely resemble mercurial ptyalism.

Oesophagus.—The burning sensation in the mouth may extend to the oesophagus, and substernal pain is sometimes pronounced. Roussel calls attention to dryness of the oesophagus, with dysphagia, as one of the early symptoms. I have noted it in several cases, and regard it as an important symptom. The globus hystericus is also observed in patients with other nervous manifestations.

Stomach and Abdomen.—Anorexia is the rule, particularly during the exacerbations; some patients, incorrectly associating eating with abdominal pains, actually suffer from fear of taking food (sitophobia.) Akoria, or sense of satiety from taking even small quantities of food, may be present. Bulimia is present in some cases, most frequently when the various psychoses are noted.

Gaseous eructations are frequent. It is often of a nervous character, amounting to aerophagy nervosa. Eructations of food are not infrequent in cases associated with anacidity and dilatation of the stomach. Vomiting may occur in the same conditions, but it is not a frequent symptom.

In the early cases, a sense of fullness or pressure over the epigastrium, which may or may not be associated with eating, is often complained of. Later, the burning pain (pyrosis) over the epigastrium, and sometimes over other parts of the abdomen, appears as the most disagreeable, persistent and characteristic symptom referable to the stomach. Colicky pains, apparently referable to other organs, may occur.

I have known pellagrins operated upon for suspected gall stones, appendicitis, and even salpingitis, when exploration revealed nothing abnormal. I, myself, had one case explored for a pyloric or duodenal ulcer, when no pathological condition was found within the abdomen. Operation, as in others who have pronounced neurasthenic symptoms, is almost invariably followed by an increase in the severity of the abdominal pains. Hunger pains are sometimes complained of, and at times the pains are girdle-like, resembling very closely the gastric crises of tabes.

Intestines.—Diarrhoea is the rule in pellagra. It varies from looseness of the bowels, two or three stools per day, to twenty or thirty bowel movements within twenty-four hours. In some cases the diarrhoea is of a dysenteric character, four or five stools per day, containing mucus and blood and preceded by griping pains. In the severe cases there is a profuse liquid diarrhoea that oftentimes weakens a patient very rapidly, and frequently it precedes death. In one of my cases there was a large hemorrhage from the bowels, which was the exciting cause of the patient's death. Constipation is sometimes present, to confuse the diagnosis, but there is nothing distinctive about it. It occurred in about 10 per cent of my cases.

Rectum.—The burning pain in the rectum is an almost constant and distressing symptom. Sometimes there are ulcerations of the rectum and fissures in ano, which cause very great pain.

Nervous System.—Associated with the digestive symptom above mentioned, are psychic symptoms, such as inability to think clearly, irritability in the early stages and mental depression later. Insomnia is frequent. Tinnitus aurium, headaches and vertigo, may also occur. There may be vague, fleeting pains in the muscles and joints. The patient often complains of fatigue from the slightest exertion, even in the beginning of the attack, and later, there is marked muscular weakness, amounting to prostration. There is loss of flesh in all the pronounced cases, and in the late stages the patient becomes cadaveric.

PHYSICAL EXAMINATION.

The Mouth.—The appearance of the tongue is distinctive. In the early stages it may be coated and fissured, with very red edges. Later, the coating is thrown off, leaving the tongue very red and smooth, though, in some cases, it is fissured, resembling rare beef. There may be aphthous, and even deepseated ulcerations on the edges and underneath the tongue. The buccal mucous membrane is also very much reddened, particularly around the edges of the lips. The gums also are reddened, and, in some cases, spongy and ulcerated, somewhat as in mercurial stomatitis.

Abdomen.—There may be gaseous distension of the abdomen, and tenderness over the epigastrium, in some cases over the entire abdomen; but often when the diarrhoea is severe, the abdomen may be flattened.

Rectum.—Examination of the rectum reveals the fiery red color, as seen in the mouth, and oftentimes extensive ulceration of the rectum with fissures in ano.

Examination of the stomach contents after the Ewald test breakfast, has shown in at least three-fourths of my cases, a deficiency, or absence, of free hydrochloric acid. Food stasis is present in the cases associated with dilatation of the stomach. Mucus is present in the majority of cases, so that the gastric findings accord with the pathological picture of chronic gastritis found in nearly all autopsies of pellagrins.

Dr. Clarence Johnson of Atlanta, in a report of twenty cases, before the American Gastro-Enterological Association, pointed out a very remarkable relationship between the absence of free hydrochloric acid and the presence of diarrhoea. In only one of his six cases with free hydrochloric acid present was there diarrhoea, while in all of the fourteen cases with anacidity, diarrhoea was an important symptom.

Microscopic examination of the feces may reveal in a small proportion of cases the entamoeba hystolitica, uncinaria ova, strongyloides intestinalis, cercomonas and other intestinal parasites, but they are simply an incident, and have no more bearing on the symptoms than, for instance, an amebiasis associated with uncinariasis.

DIAGNOSIS.

The diagnosis from the digestive symptoms alone rests largely upon the burning pain in the mouth, the dryness of the oesophagus, the dysphagia, the burning or indefinable pain in the abdomen, and the diarrhoea. These symptoms in a person residing in a community in

which there are other cases of pellagra are, to my mind, quite sufficient for a positive diagnosis, even though there has been no skin lesion present at any time, and in any community they should be regarded as suspicious of pellagra. When constipation is present without skin manifestation, I do not think a positive diagnosis of pellagra is justifiable, though in several cases of constipation I have made a tentative diagnosis of pellagra that was afterwards verified.

Careful questioning will often elicit a history of "sunburn" or slight eruption on the dorsal surfaces of the hand, that occurred in the spring or fall, which, added to the digestive symptoms just described, make the diagnosis of pellagra absolutely positive.

TREATMENT.

Lombroso's epigram, "There is no disease, only the diseased," certainly applies in the treatment of pellagra. The patient should be treated symptomatically with special regard to the hygienic management.

General Management.—The patient should be kept in bed for a "rest cure," for from four weeks to several months, in a darkened but well-ventilated room. Massage and hydrotherapy are adjuncts of value.

Diet.—Pellagrins are usually poorly nourished and the diet should be as highly nutritious as possible, containing a large amount of nitrogenous food. It should be about the same as for any case of chronic diarrhoea. In the beginning of the treatment I usually limit the food to liquids, such as barley or meat broths. The infusion from green vegetables, particularly spinach and turnip tops, known in the South as "pot liquor," is said to have some astringent effect in diarrhoea and has proved very useful in dieting pellagrins. Raw eggs and perhaps scraped beef are also permissible from the beginning. Later, tender meats, such as chicken, lamb and fish, may be given, as may also the green vegetables. The farinaceous foods should be limited to dry toast, thoroughly cooked rice and barley or oatmeal gruel. Cornbread, hominy and other corn products, should be prohibited from the beginning, and patients should be instructed not to eat them for years after the symptoms have subsided. A number of recurrences have been reported from patients going back to a diet largely of cornmeal. Milk should not be given until the diarrhoea has subsided, and then should form an important part of the nourishment. After a few days, forced feeding should be resorted to, even if there is diarrhoea, because the improvement in nutrition of the patient is the most important indication.

Medicines.—In beginning the treatment of pellagra, I usually give several small doses of calomel, one-twentieth grain every hour until one-fourth grain is given, then bismuth subnitrate in from one-half to one drachm doses, with five grains of salol every two to four hours, as may be necessary to control diarrhoea. I have rarely found it necessary to use opium. Where there is absence of or a deficiency in hydrochloric acid, dilute hydrochloric acid with pepsin, often relieves the gastric symptoms and will not infrequently control diarrhoea. Colonic irrigations with normal salt solution are often helpful, and, in some cases, where there is pain in the rectum, anesthesin suppositories give great relief. When there is stomatitis with ptyalism, the chlorate of potash given internally yields splendid results. Mild antiseptic mouth washes, such as diluted liquor antisepticus alkalinus, of the National Formulary, are helpful. Lombroso thinks that arsenic and the chloride of sodium are antidotes for the toxins from spoiled corn and, following his teachings, I have used both in large doses. The salt is usually mixed with the food. Fowler's solution of arsenic is the best preparation of that drug and should be given in ascending doses of from one to fifteen, or even twenty drops three times a day, or until the physiological effects are obtained. I have used atoxyl in a number of cases, but have not been pleased with the results. Elarson, the chlor-arseno-behenate of strontium, a lipoid form of arsenic, has given wonderful results in a few of my cases in which anemia was pronounced, but I am not yet willing to say that it is better than Fowler's solution. Salvarsan has also been used with varying results by different observers. I am inclined to think that the arsenic must be taken into the alimentary canal to get the beneficial results. Certainly I have seen very remarkable improvement in the digestion and general nutrition of patients with pellagra, following the use of Fowler's solution.

Psychic Treatment.—There is no disease or condition with which I am familiar in which it is more important for the physician to gain the confidence of the patient than in pellagra. Pellagrins are often depressed, and regular, systematic encouragement is necessary to get their co-operation in the building up process that is essential for improvement and recovery. The general impression that pellagra is an almost hopeless disease, is, I am sure, responsible for much of the depression and not a few of the suicides in pellagrins. Suggestion and the DuBois method of re-education, has in many cases given me better results than any form of medication.

AGAR-AGAR BISCUITS.—To make agar-agar biscuits it is only necessary to add finely powdered agar-agar to the flour used in making the biscuit. The amount should be, if possible, sufficient so that a dose of 5 gm. will be contained in each biscuit. (*Jour. A. M. A.*, October 3, 1914).

PELLAGRA; ITS CAUSE AND PREVENTION.*

BY

W. F. THOMSON, M. D.,

BEAUMONT, TEXAS.

My very limited opportunity for the study of this disease (I have seen but one case during the past year), and the limited time available for preparation, has reduced my part of the investigation to a review of the available literature and the observations of physicians within my own section.

Since the cause of pellagra is at present undetermined, prophylaxis is necessarily confined to the application of general hygienic measures.

All are familiar with the published reports of Lavinder, Beall of this committee, Goldberger of the United States Public Health Service, the Illinois Pellagra Commission, the Thompson-McFaddin Pellagra Commission, and many other careful investigators.

The theory that the disease is nutritional and due to lack of sufficient protein food, seems now to be quite generally accepted in America. The investigations of Beall and others seem to have established the fact that the disease is not due to the consumption of spoiled maize. Likewise, the investigations of Beall revealed the fact that pellagra was prevalent and developed in communities where the Simulium reptans did not exist—contradicting the gnat theory of Sambon.

The theory that pellagra may belong to the class of diseases caused by protozoa has some enthusiastic adherents. The fact that in sections where the disease is most prevalent, hookworm disease and amebic dysentery, two diseases disseminated by direct soil pollution, are also present and prevalent, is offered in support of the protozoan theory.

The epidemiology of the disease tends to show that pellagra does not exist to any extent in cities where the inhabitants drink deep well or filtered water, and where sewage disposal systems are in use—that its prevalence is confined to the more rural communities, where the surface well supplies the drinking water and the surface closet distributes the sewage.

Treatment has had its moulding influence on opinion regarding the etiology of pellagra. Emetin, an amebacide, is reported as being particularly efficacious in treating the mouth and intestinal manifestations; good results are reported from the administration of the arsenical preparations, particularly sodium cacodylate and salvarsan—spirochaetacides, while Dyer claims to cure the disease with quinine hydrobromate, a parasiticide.

In the city of Beaumont, with a population of 26,000, and in which filtered water is used for drinking purposes and sanitary sewage disposal is in use, there was not a case of pellagra under treatment at the time of the writing of this paper.

In an area of approximately 8,000 square miles of East Texas territory, the estimated population is 140,000. Within this territory there are not less than 560 diagnosed pellagrins. Fully one-half of this population is, or was, according to the reports of the State Board of Health, infected with hookworm. Amebic dysentery, surface wells and surface closets, are equally prevalent in this section.

In the prevention of pellagra, we should take due cognizance of all the eitological factors now under consideration. So far all possible causes that have been presented would indicate the employment of general rather than special hygienic measures. While all observation tends to prove that the disease is not contagious, in the true sense of the word, that it may be conveyed by some common carrier has not been disproved. In any event, it is very important that the pellagrin should have the advantage of institutional care and treatment. That the diet should consist of a well balanced ration is certainly true in any of the chronic diseases. An enlightened public, as to just what constitutes a well balanced diet, will probably reduce the morbidity from all wasting diseases. The advantage of a high protein diet in tuberculosis is familiar to all of us. The prevention of soil pollution by the use of sanitary closets, and the desirability of an unpolluted water supply are, of course, very important factors that apply wherever the conservation of the public health is considered.

I desire to quote from the reports of three East Texas physicians who have been particularly interested in the study of pellagra: Dr. Dru McMicken of Kirbyville, states that there are three diagnosed pellagrins to every thousand population in his community. He believes the cause of the disease is a diet deficient in proteid and advocates, as preventive measures, county hospitals and education of the public on hygiene and sanitation. Drs. Blow and Hargrove of Call, report, "Our opinion, based on the study of about one dozen cases, is roughly as follows: First, it is an infectious, parasitic disease, occurring by preference in females and in either sex in those of lowered vitality due to improper diet. Second, like other chronic diseases, tuberculosis, for instance, it is improved by a strong protein diet and a well regulated life of rest. This leads us to conclude that the most importane prophylactic measure is diet; for any one in sound, healthy, well-fed condition, better re-

*Part of the report of the Committee on the Study of Pellagra, read by direction of the House of Delegates, before the General Meeting and Joint Session of Scientific Sections, State Medical Association of Texas, Fort Worth, May 5, 1915.

sists all infections than those debilitated by impoverished nutrition. Third, having reached the conclusion that we are dealing with a condition produced by some parasitic organism, we cast about for the culprit. The recent work of C. C. Bass, Allen J. Smith and others, on the Endameba bucallis as the causative factor in pyorrhoea alveolaris, has suggested to us the possibility of a kindred parasite causing pellagra. With this in mind we have recently given emetin to two cases, both in the second attack with sore mouths and diarrhoea. There was rapid improvement in these symptoms in both cases and under the influence of a strong protein diet, both cases are showing marked general improvement. The prevention, we believe, lies in a well balanced diet and a good water supply. What constitutes a good water supply you need not have us say; but one free from ameba, we believe, is essential.''

THE TREATMENT AND PREVENTION OF PELLAGRA.*

BY

C. A. SMITH, M. D.,

TEXARKANA, TEXAS.

Pellagra is a chronic disease of unknown cause, affecting chiefly the gastro-intestinal tract, skin and nervous systems. Dating back to its discovery, some two hundred years ago, many theories have been brought forward to explain its cause. Perhaps the two most deserving of attention are the Maize Theory and the Protozoan Theory. With the Maize Theory may be grouped the theory that the disease is due to a fault of nutrition (under-nourishment or starvation,) analogous to beriberi or scurvy, as is held by Goldberger of the United States Public Health Service.

Those in sympathy with the mal-nutrition theory, point out that the disease is found chiefly among the poor and badly nourished, and that when found among the well-to-do, its presence can be explained by the fact that the individual, owing to personal peculiarities, is consuming a one sided diet, and is ''starving in the midst of plenty.'' Rich and nourishing foods on the table, either in private homes or institutions, do not nourish a patient unless eaten and assimilated.

In the protozoan theory it is claimed that the disease is more or less epidemic, and that laboratory experiments point to a micro-organism as the cause. The responsibility has been variously laid at the door of the stable fly, sand fly, etc., as the criminal carrier of the germ. The most that can be said of these theories is that they have not been proven.

It appears, then, that the treatment of pellagra must be altogether empirical. Probably the best results can be obtained in the treatment of the disease in institutions. Unfortunately, in this country, we have few, if any, hospitals devoted exclusively to the treatment of pellagra, where the general public can obtain treatment. Some private hospitals are doing excellent work for those who can afford it, but for the ordinary individual, the general practitoner seems to be the only hope.

To my mind, any system or theory of treatment would be a failure if a proper diet for the case were not prescribed. The pellagra patient should have an abundance of fresh milk, eggs, fresh lean meat, beans and peas. No canned goods of any kind should be permitted. The diet should be given at stated intervals. It is best to furnish the nurse with a carefully prepared diet list, and require that it be rigidly followed. All corn products should be prohibited.

In severe cases, rest in bed is essential. In the milder cases, certain periods of rest during the day should be prescribed, and all violent exercise should be forbidden. The patient should be protected from strong sunlight, and should be required to take exercise early in the morning and in the evening when the sun's rays are less strong, if able to do so.

Should a change of climate be advocated? I believe the only advantage to be gained by a change in climate is to be had in the change in diet, which it would bring about; and perhaps some benefit to skin lesions would come from a change to a more northern climate; but practically a change of climate is not essential. Fair conditions, at least, can be had at home by patients who are not able to go away.

No matter what the theories may be as to specific treatment, the patient should be watched and appropriate remedies administered to combat untoward symptoms. For the stomatitis, astringent and antiseptic washes should be given. Diarrhoea should be treated with salol and bismuth products, and if very severe, some of the opium preparations may be necessary. The nervousness, restlessness and insomnia, may be treated with trional, hyoscin or other appropriate nerve sedatives. Irritation of the genito-urinary system may be treated with hexamethylamin. Dyer of New Orleans, recommends for the stomatitis ferri lactatis and potassium chloratis aa, 3 grains, combined with cascara, and nux vomica. He also recommends quinine hydrobromate as a specific for the disease; in mild cases, he gives from two to five grains three times a day, and in severe cases, as much as ten grains are given every two

*Part of the report of the Committee on the Study of Pellagra, read by direction of the House of Delegates, before the General Meeting and Joint Session of Scientific Sections, State Medical Association of Texas, Fort Worth, May 5, 1915.

or three hours. He says this drug has always produced positive results in his hands.

In the matter of the use of arsenicals in the treatment of pellagra, the newer preparations, such as atoxyl, soamin and sodium cacodylate, seem to be the favorites. All of them contain from 22 to 26 per cent arsenic, and are put up in convenient form for hypodermic use. In my opinion, it makes very little difference which drug is given. It is remarkable what large quantities of arsenic these patients will stand. As high as 15 to 20 grains are reported to have been given daily "with beneficial results." To my mind, such excessive dosage cannot but prove injurious to our patients, whereas, reasonable and moderate dosage might prove of great benefit.

Now a word about the use of salvarsan in pellagra. It seems to me that the use of this remedy, so potent for good in the disease for which it is intended, is not only useless, but positively dangerous in pellagra, and that to give it is a serious offense against rational medication.

My personal experience in the treatment of pellagra is limited to some twenty odd cases, all of which were given arsenical injections, usually sodium cacodylate. Beginning with two grains a day, the dose was gradually increased to seven grains within two weeks. When the patient was improving, a weekly dose of five grains was continued for several months. A very nourishing diet of milk, eggs and red meat, with vegetables, such as beans and peas, was insisted on from the very first, and I am not at all certain that, in the light of recent investigations, this diet did not cure my patients instead of the drugs which I gave.

My patients were weighed once a week, and I felt if they showed some gain, the case was improving. Forced feeding did not seem to be contra-indicated in any of my patients, although a few of them had to be given a soft diet because of sore mouths. Some of them complained of colicky pains after eating, and there was an occasional diarrhoea, which required special treatment. As a rule, solid foods were well borne, even in severe cases.

There is no specific for pellagra; but there is a treatment for the disease, the same as there is a treatment for typhoid fever, tuberculosis and many other diseases for which no specific has been found. It seems to me that in looking for specifics, we quite frequently overlook the general management of the case.

The treatment may be summed up, in removing the patient to an institution, if possible, with proper diet, proper rest and exercise, and with the intelligent treatment of the symptoms without too much drugging. Institutions have wrought wonders in the treatment of tuberculosis. Is it not possible that they are as necessary in pellagra? Such institutions have been established in Italy with excellent results.

Personally, I am becoming more and more convinced that the disease is caused by faulty diet. That this is only a personal opinion, I am fully aware, but all of my cases began to improve promptly when given a proper diet, irrespective of the treatment. All of the relapses I have observed in my practice, came from a return to the old form of diet. It has been urged that the so-called seasonal recurrences are due to leaving off the more nourishing foods, those which furnish protein, and substituting for them the less nourishing green vegetables.

Perhaps the great increase in food prices has had something to do with the spread of pellagra, if it be admitted that the disease is due to a fault in the diet. Even if it be insisted that the disease is caused by a micro-organism, strengthening the diet would at least afford the general public some increased resistance to its ravages.

Inasmuch as fresh meat of any kind is seldom seen on the tables of the very poor of our Southland, how we may increase the protein component of the diet, and decrease the carbohydrates, such as corn and molasses, seems to be the vital question. Goldberger suggests that a campaign of education be inaugurated among our rural population and the poor of our cities advocating the raising of more legumes (peas and beans,) and the material increase of these in their daily diet, especially during the late fall, winter and spring months.

There is excellent reason to believe that a substitution of dried legumes for much of the carbohydrates (corn and molasses) would go a long way toward preventing the disease by furnishing the necessary protein component. I do not wish to be understood as saying that legumes are more to be desired than meats, if attainable, but rather that they furnish a fairly good substitute, easily attainable.

A correction of the restricted, one sided diet, which can always be demonstrated in these cases, must be had before much progress can be made in the way of treatment, and this will, in my opinion, go a long way toward the prevention of the disease.

In the absence of positive knowledge of the cause of pellagra, let us instruct our poorer population how they can prevent the disease by overcoming the faults in their diet, and show them that there is a cheap and valuable substitute for meat in the dried legumes, which grow so abundantly in our Southland.

Citarin.—Citarin was admitted to New and Nonofficial Remedies in 1906. The Council on Pharmacy and Chemistry held that experience had failed to demonstrate the value of Citarin as a uric acid solvent and hence directed the omission of it from New and Nonofficial Remedies.—*Jour. A. M. A.*

A PELLAGRA CLINIC.*

BY

O. M. MARCHMAN, M. D.,

DALLAS, TEXAS.

The following account of a pellagra clinic conducted by the Dallas Medical and Surgical Society, August 6th, 1915, together with abstracts of the discussions and papers presented on the occasion, may be of interest to the profession of the State, and its publication is for that reason suggested.

The clinic itself was a pronounced success. There were present some twenty-five patients, in all stages of the disease, and among all sexes and ages. There were approximately two hundred and fifty physicians in attendance, including many from the State at large. The discussion extended throughout the afternoon and evening, with suitable intermission for refreshments. The meetings were held in Baylor Medical College.

The following special commission on the study of pellagra was appointed, with instruction to report their findings at the Oriental Hotel at 2 p. m., November 8th, 1915, during the meeting of the Southern Medical Association. The personnel of the commission follows:

Etiology.—Dr. E. S. Fortner, Chairman; Drs. W. J. Calvert, W. H. Moursund, Elbert Dunlap, J. H. Black and A. H. Fortner, all of Dallas.

Prevention and Treatment.—Dr. H. Leslie Moore, Chairman; Drs. W. T. White, Jno. S. Turner, J. W. Embree, W. C. Swain and C. M. Grigsby, all of Dallas.

Committee From the State at Large.—Dr. W. L. Allison, Fort Worth, Chairman; Drs. J. W. Wilson, Navasota; Mack Parrish, Gainesville; C. A. Searcy, Hempstead; C. C. Parrish, Gainesville, and K. H. Beall, Fort Worth.

The following discussions were had (abstracted):

THE DIAGNOSIS OF PELLAGRA.

Dr. John S. Turner of Dallas, said that in diagnosing pellagra, one must keep in mind that the disease is an intoxication, the character of which is as yet unknown; there are many theories, but none as yet proven. We do know, however, that the intoxication may take on either of two forms, *viz*, acute or chronic, and is manifested by triad general symptoms which are—psycho-neurological; gastro-intestinal, and dermatological. The disease manifests itself in the beginning in one of these three groups of symptoms. Most of the early cases coming to me do so for the psycho-neurological condition; but there is often much disturbance in gastro-intestinal or dermatological directions. Some observers have said that the gastro-intestinal type predominates as initial symptoms; I believe that the two types mentioned first are surely the premonitory symptoms.

There are also three phases of the disease, after it has become recognizable, the typhoidal, chronic and recurrent. The typhoidal is a very acute type with gastro-intestinal symptoms predominating, running a rapid course, with usually death or recovery ensuing within the course of a few weeks, or possibly within a few days. The chronic phase runs a slow and chronic course, without at any time rendering the individual entirely helpless, but ranging all the way from a serious exhaustion to almost unrecognizable symptoms of the disease. Many persons suffering from this form of the disease are not acquainted with the fact that they have pellagra, as they are yet able to continue their usual avocation; they do not feel very well, yet are not positively ill. The recurrent phase represents those cases that have an acute attack, with most of the symptoms rather marked, following which an apparent recovery occurs, and the individual is supposed to be entirely well, this condition going along for some months or even over a period of a year or two, when another attack of the same character occurs. I have seen this phase of the disease extend over several years, usually terminating in dementia.

The earlier symptoms of pellagra are first, parasthesia, particularly of the extremities, often of the stomach and bowels, sometimes extending to the mouth, tongue and other parts of the body. This symptom is of the psycho-neurological type, and very often it is weeks or even months before other symptoms develop, the burning in the feet in the case of some patient being so intense that they are unable to bear covering even during the coldest weather. The next early symptom is an acute indigestion, with more or less diarrhea, lack of desire for food, etc., soon after which pseudo-ptyalism and pyorrhea arise, which are later known to be early symptoms of pellagra. Following this is restlessness and sleeplessness, melancholia, crying, etc., and other more or less marked symptoms of the nervous system, and of the gastro-intestinal tract, soon followed by the rough skin, sometimes called "turkey-foot" skin, because of the roughened appearance, resembling very much the red, corrugated skin of the foot of the turkey.

This disease may be confused with general tuberculosis, tuberculosis of special organs—the kidney, for instance—pernicious anemia, hookworm, typhoid fever, chlorosis, psychasthenia, neurasthenia, or other depressive conditions, and later with brain tumor, syphilis of the nervous system, or manic-depressive insanity. In order to differentiate, it is necessary to investigate for tuberculosis and its special organism; to investigate the blood picture in pernicious anemia; or to look for the ameba and hookworm; or to have a Widal made for typhoid fever. The history of chlorosis in young girls will help in that particular. The most difficult differentiation is in psychasthenia and neurasthenia, or later in a manic-depressive insanity, while a brain tumor will give off characteristic focal symptoms, and a Wassermann will reveal syphilis of the nervous system. In thinking of the diagnosis and symptoms of this disease, one is impressed with the similarity of symptoms that occur when there has been a removal or a degeneration of the anterior lobe of the pituitary gland. Our investigators tell us that when such removal has occurred, that the temperature drops to sub-normal, there is muscular inactivity, great weakness, and rapid emaciation, with loss of appetite, low blood pressure and uncontrollable diarrhea, and in some cases a disturbed co-ordination. This chain of symptoms is quite significant and leads us to suspect that the pituitary plays some part, as yet unknown in this disease.

CAUSE, TREATMENT AND PROGNOSIS.

Dr. Wilmer L. Allison of Fort Worth, said: I would like to add a small bit of information as to the history of this disease, which to my mind is significant and which possibly helps to account for its introduction into this country. I am told by Dr. J. S. Davidson of Thomasville, Alabama, that a number of Italians known as "stave-getters" were imported into his neighborhood some years ago. It was noticed at the time that they had a symmetrical

*This rather comprehensive account of a most excellent clinic on pellagra, held in Dallas, under the auspices of the Dallas Medical and Surgical Society, August 6th, 1915, fits in nicely with the papers on the subject included in this number of the JOURNAL, and we are pleased to so present it. The acquisition of this material had been anticipated, and arrangements were made to hold the forms until it could be prepared for publication.—THE EDITOR.

eruption on the backs of the hands, though they, themselves were not sick and were able to work. A short time afterward the negroes, who were associated with them in their work, developed the same symmetrical eruption on the hands, which, for want of a better name, they called "stave-getters itch." Some of the negroes died and Dr. Davidson says that as he looks back upon that time he knows now that they were cases of pellagra. It was in this same state that Dr. Searcy discovered pellagra in the asylum and wrote one of the first papers on the subject ever printed in this country.

There are many theories as to the cause of this disease, none of which have been proven. To my mind the protozoan theory, with the stable fly as a transmitter, is the most likely theory. The Thompson-McFadden Pellagra Commission has found that there are fewer cases of pellagra among those who eat corn daily than there is among those who eat corn rarely or never. They also found that there were more cases among those who ate fresh meat daily than among those who ate it rarely or never. There was very little difference in the number of cases found among those who ate eggs daily or who did not eat eggs; while, on the other hand, there were fewer cases among those who drank milk daily than among those who rarely or never drank milk. The very careful and scientific studies of this commission would indicate that food plays no part in the causation of this disease. On the other hand, this commission found that in those mill villages of South Carolina which had a good water carriage system for disposal of sewerage no new cases of pellagra developed, while in those villages which had no water carriage systems of sewerage disposal new cases did originate. It was also shown that in the city of Spartanburg, there were more cases of pellagra originating in that area of the city which was not supplied by a water sewerage system. These facts are very significant and point at least to one measure in prophylaxis. It is also a significant fact that of the cases originating in Peoria State Hospital the majority occurred among those patients who were uncleanly in their habits.

It has been shown time and again that the majority of patients between the ages of twenty and fifty are women, while outside of those ages the sex incidence varies but little. In children under the ages of two, however, there has been recorded but few cases. Dr. K. H. Beall of Fort Worth, some years ago called attention to this peculiar sex incidence, and suggested the conclusion that the disease is contracted around the home in the day time. Both men and women are, of course under the same sewerage disposal influences during the night, when they are all at home. While this is insignificant, it makes one think that the matter of sewerage disposal might not be so important in a direct way as it might be in an indirect way, in that when the sewerage is not properly disposed of other sanitary conditions are probably not so good, and there is a greater consequent opportunity for flies to breed and become more numerous. There is nothing in the history of the disease that would indicate heredity. The studies of Sambon would show that children are never born with the disease and do not contract it while in institutions, even though nursed by a pellagrous mother. These same children, however, have been known to contract the disease within three or four weeks after being sent back to a pellagrous district, where they were not under the same protection afforded by the institution. Sambon uses this fact to demonstrate that the incubation of the disease is probably no longer than three or four weeks.

The Thompson-McFadden Commission divided the mill villages studied, into three zones. The first zone included those persons living in the same house with a pre-existing case of pellagra. The second zone included those living next door to a pre-existing case. The third zone included those living further away than next door. They found that 6.5 per cent of those living in the first zone developed pellagra, while of those living in the second zone only 1.7 per cent developed the disease. Only .5 per cent of those living in the third zone were affected. It is also a significant fact that of the many thousands of nurses and doctors living in institutions where pellagra is treated, with but few exceptions, none of them have ever developed the disease though they would certainly be classified as living in the first zone. To my mind this fact excludes the possibility of the disease being contagious and makes me believe stronger than ever that it is an insect borne disease. Studies of other insect borne diseases present very similar facts.

I shall only mention a few of the symptoms. Statistics show about 40 per cent of pellagrins develop mental disease. These mental complications are more in the nature of a delirium following a profound intoxication, and are not the type of insanities we know. Mental symptoms become more frequent, with repeated attacks. The nervous symptoms are mostly of the character of a neuritis or trophic vaso-motor type. Of the gastro-intestinal symptoms many are due to the diminution, or absence of hydrochloric acid, which is in turn probably due to an intoxication trophic vaso-motor disturbance. There are probably two types of diarrhoea found in the disease. One due to the absence of hydrochloric acid and the emptying into the intestines of an undigested mass. This type is always relieved promptly by the administration of hydrochloric acid. The other diarrhoea is probably due to the presence of inflamed lesions, which occur in spots throughout the intestines and which look very much like the sore mouth.

The course of the disease varies anywhere from a few weeks to several years. It is difficult to know exactly when a patient is well of the disease. Many patients have been known to remain free of any evidences of the disease for one or two years and then have another attack. In 1910 there came under my observation a child, aged six years, with a typical eruption, accompanied by some of the other symptoms. This child made an apparently perfect recovery within a few weeks, without any treatment and remained apparently free from the disease until the spring of 1915, when the eruption again appeared. I do not believe this was a new attack. It was a recurrence of the disease, which had been dormant all this time.

As to the prognosis, probably 80 per cent or more, of the cases recover. Some of these apparent recoveries may later show relapses but that there are permanent recoveries we have no doubt, in view of the fact that many cases have remained well for several years. Children, as a rule, make good recoveries and that often without any special treatment. The mental symptoms practically always disappear if the patient gets well physically, and chronic insanity or chronic nervous disease rarely if ever occur.

As to the treatment, we certainly have no specific remedy, though many have been heralded as being near specific. Not knowing the cause of the disease we are necessarily more or less in the dark as to its proper treatment. However, we should remember that we are dealing with a disease the symptoms of which are practically all of a toxic nature. Many of these toxines are probably secondary and come from a disordered gastro-intestinal tract, and do not belong primarily to the disease itself. Thus it may be that many of the remedies, which at times seem

to give relief, do so by virtue of the fact that most of them act as intestinal antiseptics and relieve the patient of at least a part of the toxemia.

In view of the fact that we do not know the specific cause of the disease, the prophylactic treatment must be confined to the ordinary sanitary measures and to insuring the prospective victims a wholesome, well balanced diet. In view, also of the evidence to support the theory that pellagra is an insect borne disease, we should exercise every precaution against the bite of all insects. Practically all are agreed that a wholesome, well balanced diet, which is easily digested, with rest in bed, are essential elements in the treatment. In addition to this, one should use intestinal antiseptics, to rid the patient of as much secondary intoxication as possible; they also help to free the patient of primary toxins.

Hydrochloric acid is indicated in a majority of cases and should be given after meals, at about the time it normally appears in the stomach. I still believe that sodium cacodylate is one of the best general remedies that we have against pellagra.

PELLAGRA AND ITS TREATMENT.

Dr. W. T. Wilson of Navasota, said: Pellagra is chiefly prevalent among the poorer classes, those least able to bear the expense of sickness and the loss of time from their labor; this class also lack the facilities for proper care and nursing. It is more prevalent in rural than in urban districts. Whether pellagra is infectious directly, or through putrefactive changes of material from surface toilets, conveyed by insects, or whether absence from the diet of essential ritamines is the cause, is immaterial. So long as we are uncertain as to the cause, we should give every attention to the sanitary side, at the same time not neglecting the proper selection of food.

As to management, the pellagrin should be kept in a cool room, with plenty of fresh air, but no sunshine, for at least ten days. Convalescent patients should be kept out of doors, both in the morning and evening, but not in the sunshine.

As to diet, egg albumen—egg strained through gause, is more easily taken. Albumen comes first in value as a food for pellagrins. Buttermilk is the second best diet. As soon as a patient shows improvement great care should be taken in increasing the food supply; at the same time one must bear in mind that a sufficient number of calories of food must be taken in a given time to offset the destruction of tissues, and an additional amount is needed to replace and build up. Hasty feeding often brings on acute indigestion, which must be avoided, as an attack of indigestion invariably produces return symptoms of the disease.

On May 4th, 1914, I was called to see a man who had been severely burned from a powder explosion. I treated the case with official picric acid gauze. Later I was requested to examine a puzzling case; I had with me four single yards of picric acid gauze. The patient was a mulatto girl, fifteen years old, demented, mouth and tongue red and very sore, tongue swollen and a large amount of saliva flowing from the mouth. She had refused to take milk for forty-eight hours; bowels had moved thirty-three times in the past twenty-four hours; had complained of girdle pains; arms, face and legs showed large blisters, coalesced. I diagnosed the case as moist form of pellagra.

My experience up to this time was, that such cases proved fatal. In doubt as to what to advise, the idea occurred to me that picric acid gauze would be a good dressing. I applied the gauze to each arm and to the leg, binding them further with cotton and bandage. I could find no data on picric acid administered internally. On my own initiative, I prescribed a ½ per cent solution as a gargle, and put the patient on twenty-five drops of a 1 per cent solution, to be given every three hours, and later, t. i. d. I kept her on a diet of milk and eggs for ten days, after which regular meals were given. To my surprise this case completely recovered in thirty-five days. In fact, all symptoms had disappeared in twenty-five days.

I desire now to report the first one hundred cases treated. These range in age from sixteen months to eighty-two years. In a majority of cases a complete report is difficult to secure, as many are from quite a distance, and as improvement continues they neglect to return. The diet in these cases consisted of milk and eggs. None were diagnosed as pellagra unless the characteristic skin lesion was present, either in the dry or moist form.

The reports of Drs. Searcy, Mahan, Sealy, Harris, Greenwood, McAlpin, McMichen and Davis, 169 cases treated with picric acid (seven of whom were insane,) show the following results: Girdle pains disappeared in three days; mouth and mucous membrane normal in five days; intestinal condition normal in ten days; eruption disappeared in three weeks; insane normal in three weeks; no deaths. They report six cases with a return symptom, but all of these were treated but a short time last year. They rapidly improved this year on being put again on the picric acid treatment.

From May 4th, 1914, to December 31st, 1914, I treated 52 cases. Two died of pulmonary tuberculosis, one of chronic nephritis. From January 1st, 1915, to June 9th, 1915, I treated 48 cases, a total of 100 cases to date. Two cases only had a recurrence. Of the last 48 cases, 90 per cent have been treated with the gargle and internal medication, leaving off the local dressing. However, I believe the local dressing is of special benefit in mixed infection of hands and feet. The average time of recovery has been the same in both treatments; that is, with or without the local dressing.

Out of this series of 100 cases, the ages ran as follows: 1 to 10 years, 9 cases; 10 to 20 years, 16 cases; 20 to 30 years, 23 cases; 30 to 40 years, 29 cases; 40 to 50 years, 10 cases; 50 to 60 years, 8 cases; 60 to 70 years, 4 eases; 82 years, 1 case. There were 24 male and 76 female; 24 white, 76 colored. Insane, 10. The average age was 31-1/10 years.

The picric acid treatment places the patient in a condition to take food within a short period, and without pain. The return of appetite and digestion soon becomes normal, and with an adequate consumption of food the patient is usually back to health in a short time. The return of appetite marks the convalescent stage. I am now prescribing a half drachm of a 1 per cent solution, three, four or six hours apart (*not* in capsules.) If there are any symptoms of depression, the dose is reduced or not given so frequently. In severe acute cases, I have given as much as one drachm every six hours, for a few days.

I here refer to 319 cases treated to July 31, 1915, ranging from the mild to the severe type. Of this number only 3 have died, and, as stated heretofore, 2 of these died of pulmonary tuberculosis, and 1 of chronic nephritis.

We have seen 2 cases in which all symptoms of pellagra disappeared while under treatment with picric acid, except the diarrhoea, which seemed to increase.

I believe an effort should be made to have a Pellagra Commission appointed in this state, composed of physicians, one of whom should be thoroughly familiar with tropical diseases. Texas is a fine field for original study, as foci of the disease have but recently been established in many localities.

I am quite sure there would be fewer cases of pellagra if we would give more attention to sanitation.

I would suggest that in making solutions of picric acid, the druggist put the acid in a mortar, add some water, then alcohol, then water, q. s. It requires 17 per cent alcohol to make a clear 1 per cent solution.

I desire to add a few words on diet. Often we see idiosyncrasies in the taking of food. It is well to select those foods best suited to the patient. Sweet milk should be diluted or pasteurized, and when severe stomach symptoms occur, should be washed at once, and the diet changed. There is no absolute rule as to diet.

THE TREATMENT OF PELLAGRA.

Dr. C. A. Searcy of Hempstead, said it had been his misfortune to see many cases of pellagra and that prior to the summer of 1914, the results had been practically all the same with him—death. Since that time he reports that he has had only three deaths and that two of these only can properly be laid at the door of the disease itself. He discussed the records of 53 cases, all of which had been carefully diagnosed, and all of which were fairly typical cases. He said:

In 1914 we treated 15 cases. Of these there was 1 male and 14 females, ranging in age from 11 months to 60 years, the average age being 26. The skin eruption and stomatitis were present in 15; abdominal pain present in 9, and in 2 the mental symptoms were prominent. Of these 15 cases 13 were cured, and 2 died. Neither of the latter received any treatment (the 11 months old and one of the mental cases.) Of these, 9 suffered a recurrence, and returned to us during the present summer. They were not very sick and a week or ten days was sufficient for a cure in each instance. One of the original 15 cases has not been heard from, but the others appear to be in good health.

During the present summer, we have treated 38 cases. Of these 36 are females and two are males, and they range in age from 6 to 65 years. The skin eruption was present in 38 cases; diarrhea and abdominal pains present in 15, and abdominal pains without diarrhea present in 6 cases. There was a complication of malaria in 5 cases. Our records show that of these cases 22 appear to be cured, 5 are improving, 8 have not reported since we first saw them and 3 have died. One death was in a patient 8 years of age, another 65 years of age and the third was an epileptic, who died two or three days after treatment was begun. It required an average of eighteen days for a cure—from one to eight weeks, with one case extending over three months.

All of our cases were negroes, who lived on the East side of the Brazos river, and with two exceptions, on the edge of the bottom land. The prevailing winds were from the river and surrounding lowlands. The diet was principally bread and syrup, during the winter months, with a restricted ration of bacon and beans. The use of open closets is universal among these people and flies are plentiful. In no instance did we have more than two cases from the same house.

The treatment in these cases was the internal administration of a teaspoonful of a 1 per cent aqueous solution of picric acid, in one-third glass of water, four times a day. In children the dose was reduced to from fifteen to thirty drops, four times a day.

Those suffering from a stomatitis were caused to rinse their mouths well with the acid before swallowing. In this way we served the double purpose of cleansing the mouth and internally administering the drug.

We found this treatment to satisfactorily control the diarrhea and sore mouth, as well as the pain and other symptoms complained of, except in two cases, which required a few doses of paregoric for relief of pain. In the malarial complications, of course, quinine was administered. Two of our patients were very anaemic, and to these we gave a combination of tincture of the chloride of iron, strychnin sulphate and Fowler's solution, four times a day for two weeks.

In those cases which failed to show improvement in the skin lesions following the picric acid treatment for one week, the use of picric acid gauze locally was resorted to. The gauze was allowed to remain for one week, removing it entirely if there was no improvement, and continuing the treatment until cured otherwise. The internal application of the remedy was persisted in. We were compelled to resort to this practice in 8 of our cases.

During the summer of 1914 we paid no particular attention to the diet of our patients. During the present year, however, we have been advising certain of them to eat plenty of beans, peas, lean meat, eggs and milk.

We did not restrict our patients as to their movements, permitting them to pursue their usual vocation wherever they were able to do so.

It cannot be said that either the diet or the protection from the actinic rays of the sun, had anything to do with the cure in these cases.

I do not care to claim too much for the picric acid treatment, but results in the few cases in which we have tried it, have been such as to lead me to the conclusion that it is as much a specific in this disease as quinine is in malaria. Out of 51 cases treated, we have had only 3 deaths, and one of these was complicated with another disease and received very little treatment.

In this treatment, it is best for the attending physician to see his patient at least once a week, and those who are confined to their bed should be seen oftener. Suggestion and encouragement is helpful. Various tonics may be indicated, and it will do no harm to govern the diet according to the United States Public Health Service publication. It will be necessary to guard the sweet milk during the administration of picric acid, that the diarrhea may not be increased.

PELLAGRA IN CHILDREN.

Dr. J. Spencer Davis of Dallas, said: Since the discovery of pellagra in America, a vast amount of literature has appeared upon the subject, but very few have discussed the subject as it relates to children. The most extensive work on this particular phase of the problem is Simonini's Pellagra in Children, which is to be found in the Surgeon General's Library. Most of the information I have to give is derived from this text.

Statistics as to the frequency of pellagra in children vary greatly, but it probably averages about 10 per cent of the total number of cases. The house, as a medium of spread for the disease, would cause one to expect a larger percentage of cases among children. Probably a large number of children have pellagra of such modified type that it goes unrecognized until puberty. Mortality statistics in children would tend to confirm this fact, and in that respect pellagra in children very much resembles tuberculosis in children. We would expect that the morbidity would be greatest in those that undergo the greatest change in puberty. This is found to be true, as females more frequently have the disease than males. Also, we find that after the climacteric

the morbidity in the two sexes is practically the same.

A great deal of emphasis has been placed upon the so-called D. D. D. in the diagnosis, that is, delirium, dermatitis and diarrhoea. But if one waits until all three of these are present before making a diagnosis, the patient will be so far advanced in the disease as not to be amenable to treatment. Besides delirium, there are other nervous manifestations, which are of just as much importance in making a diagnosis. From what information I could obtain, it seems that all of the nervous tissues may be involved in the process, even the membranes covering the brain, and those surrounding the blood vessels.

So eminent an authority as Spiller was of the opinion that the changes which occur in the nervous system in pellagra are due to intoxication, rather than to an actual local involvement by bacteria. A great many have compared the pathological changes in pellagra to those of general paresis, in attempting to explain both on the basis of an intoxication. We have learned that general paresis is due to a local bacterial infection in the brain and it is probable that the lesions in the nervous system in pellagra are due to some infectious agent.

Sleeplessness is an evidence of some cerebral involvement, and is almost as pronounced in children with pellagra as in adults. When the spinal cord shows signs of involvement at a certain level, the reflexes below this level are usually exaggerated, while the reflexes at the level of the lesion are usually absent. So that increased or diminished reflexes should aid us to some extent in making the diagnosis. Some of these cases show signs of tetany, and the muscles of an extremity may become rigid on making compression of the blood supply. The delirium which is frequently seen in adults is perhaps not so frequently manifested in children. Perhaps the delirium in older people is due to a combination of the pellagra and some senile degeneration.

Two varieties of lesions of the skin are described: Moist and dry. The skin manifestations in children do not differ materially from that of adults and do not require any special description. The lesions on the face are most frequently located on the cheeks near the outer canthus, on the forehead and on the neck. The lesion sometimes takes the shape of a butterfly and may simulate lupus. When the lesion extends completely around the neck and down over the upper part of the sternum, it is called Casal's necklace, after the Spanish observer who described it in the eighteenth century.

After the lesion is desquammated there is frequently left an area which is non-pigmented, and which strongly contrasts with the surrounding area. In describing the pathology of these skin lesions, figures whih strongly resemble the figures described by Councilman, as occurring in smallpox, are found, and occasionally some of these bodies seem to be undergoing division, but no one has definitely established their connection with pellagra.

One is constrained to ask, what is the influence of light in producing these lesions? There is a disease in animals that have been fed upon buckwheat, known as Fago Pyrismus. In this disease the animals that are dark colored escape the disease, while those that are light colored and are exposed to sunlight, develop a pathological state closely simulating pellagra. The animal shows lesions on the skin which some writers think are identical with pellagra. We also know that the injection of a substance like hemato porphyrine renders animals susceptible to light, and that if the animal is kept in the dark after the injection of this substance, it will continue to live, but if it is exposed to bright sunlight it dies in a very short time. It is probable then that the sunlight activates the poison of pellagra, and it is not necessary that the poison should produce its effect at the point of activation, but after being activated it may be carried in the blood stream and produce a dermatitis in a part of the skin not exposed to sunlight. We also know that the malarial plasmodium is activated by sunlight, and although an individual may be inoculated with malaria at any time of the day, we expect him to have his chill in daylight.

The skin rash in children is perhaps more evanescent than in the adult, in some cases being present only a few hours; and while cases of pellagra have been described in which the skin symptoms were absent, yet one rather hesitates to make a diagnosis without some evidence of involvement of the skin of mucous membranes. If the case is carefully watched, and especially if it is exposed to sunlight, we are almost certain to find this most important sign present at some time.

Diarrhoea is a very important symptom in children, and frequently it is the only sign which is present until after the child has passed through several attacks, when the skin manifestations show up and enable us to make a positive diagnosis. This symptom is perhaps the most constantly present, and was described as occurring in the earliest cases which I have seen reported, *viz*, at three weeks. The signs in the mucous membrane of the gastrointestinal tract are very similar to those occurring in adults and do not require any special description.

All of the Italian authorities who treat the subject of pellagra in children in their writings, are in accord with the opinion that the pellagrous mother should not be permitted to nurse her offspring. They all agree that the child is almost a sure candidate for the disease. Of those not separated from the mother a large number die by the fifteenth month, and gastrointestinal troubles is a very frequent cause of the death. Not only should the child not be permitted to nurse the mother, but it should be removed from the endemic area. A great many cases are on record where children who have been separated from their mother and have been entirely removed from the pellagrous district, have developed normally.

Some of the Italian authorities have made analysis of a large number of specimens of breast milk of pellagrous mothers. The only difference between this and breast milk of healthy women was found to be in a deficiency in some of the protein constituents, with an excess of mineral salts. Upon investigating children reared upon this poor milk, they also found that rickets and similar diseases of nutrition very frequently occur, even when the children did not contract pellagra.

For checking the diarrhoea we must rely largely upon the use of some of the opium preparations, and we should exercise every care to give the older children digestible diet. Among the other medicinal agents which are of value, there is to be mentioned cacodylate of soda or similar arsenical compounds. With the use of picric acid I have had no experience, although some are making some very flattering reports. It is being used locally to skin lesions in 1 per cent solution, and a few drops is also given internally. I think a word of caution as to the chances of this drug producing damage to the kidneys when administered internally, is not out of place, especially as one sees deaths reported in the literature, even as the result of the local applications of this drug.

THE SOIL A FACTOR IN THE CAUSATION OF PELLAGRA.

Dr. C. C. Parrish said, that in his opinion the soil is the medium for the causative factor of pellagra. He is of the opinion that the data gathered by the

Thompson-McFadden Pellagra Commission confirms this theory, and summarizes the findings of the Second Progress Report of that body as follows:

The large active foci of pellagra in Spartanburg county were *in* and *near* the large centers of population, particularly in the cotton mill *villages*.

No definite connection between occupation and the occurrence of pellagra has been found, although the high pellagra morbidity in women and children points to the *home* as the place in which the disease is usually contracted.

In the group of incident cases, evidence of close association with a pre-existing case was disclosed in more than 80 per cent.

A house-to-house canvass of the homes of over 5,000 people living in six endemic foci of pellagra, failed to disclose any definite relation of the disease to any element of the diet.

In these villages new cases of pellagra originated almost exclusively in houses in which pellagrins had lived, or next door to such a house, suggesting that the disease had spread from old cases as centers.

Pellagra has spread most rapidly in districts where insanitary methods of sewage disposal have been in use.

The blood showed a lymphocytosis in most cases, but has not disclosed any constant abnormality characteristic of pellagra.

There was no evidence of inheritance of pellagra.

The immediate results of hygienic and dietetic treatment in adults have been good, but after returning to former conditions of environment, most of the cases recurred. In children, prognosis was very much more favorable.

Frequent use of cornmeal as an article of diet was not a factor in the causation of pellagra.

Frequent use, even daily use, of fresh meats and of eggs afforded no relative protection from pellagra.

Pellagra morbidity was higher in congested communities using surface privies, than in more sparsely settled districts in which similar methods for the disposal of excreta were employed.

In two cotton mill villages completely equipped with water-carriage systems of sewage disposal, it was impossible to find cases of pellagra which had certainly originated there, although some cases which had originated elsewhere were present.

This study indicates that methods of disposal of human wastes may prove to be a determining factor in the spread of pellagra in certain communities and it suggests a possible method of prophylaxis, which is now being tested in a practical way.

Children under 2 years of age were practically free from the disease, and yet from the age of 2 to 10 years children showed an excessive amount of pellagra. Congenital pellagra evidently did not occur in this study. Furthermore, the almost complete absence of pellagra in the first two years of life could hardly be explained as due to a supposed long incubation period of the disease, because there are many known instances in which the typical symptoms have developed in older persons within two months after moving into a pellagrous district, and there have been some cases of typical pellagra in children less than a year. It would seem necessary, therefore, to conclude that children under 2 years of age in Spartanburg county, have been physiologically insusceptible to the disease, or else relatively very little subjected or exposed to the causative agencies, or both. After the age of 2 this apparent protection from pellagra was no longer present, and the disease was very prevalent up to the age of 10 or 12 years, when the morbidity rate again declined. Apparently some change occurred at or near the age of puberty, which markedly reduced either susceptibility or exposure to pellagra and which persisted for some years. After the seventeenth year the females were again subject to the disease, and continued to suffer at an increasing rate to the end of the fourth decade of life, while the males were practically free from the disease during this whole time. From 20 to 29 years of age, women in this population were 22.3 times more frequently afflicted with pellagra than men, and from ages 30 to 39 they were 22.1 times more subject to it. There was certainly some very important sex difference, either of susceptibility or of exposure to pellagra, or both, in these age periods. After 50 the sex difference in relation to pellagra was no longer evident and the old people of both sexes seemed to be about as frequently affected by pellagra as the children.

In both males and females there was a striking fall in prevalence between the ages of 10 and 20 years.

The excessive prevalence among the farming classes was found in the townships which had a relatively large mill village population.

The great mass of the population living under the same general conditions of environment and using the same food but living at a greater distance from cases of pellagra, escaped the disease.

Dr. E. Mack Parrish of Gainesville, in answer to a statement during the discussion, by a physician who had practiced medicine in Mexico for five years, among a large general clientele, that there had been but two cases of pellagra in Central Mexico during that time, and who asked why, if the disease is one of southern rural life, it does not appear in Mexico, said that Mexico is not an industrial State and that the average Mexican would rather fight than work; that pellagra is to be found in infected soil, and Mexico has not yet been infected, and that the Mexican people had not during the last three years been exposed a great deal to the soil. Dr. Parrish asserted, however, that there are centers of pellagra in Mexico, and that they occur in agricultural districts, where the soil has been cultivated during the past three years.

In answer to an inquiry from Dr. Wilson, who asked why, if the disease spreads through the soil, we have had the greatest outbreaks in cotton mill villages and not on the farms, he states that it is the soil around dwelling houses that is most susceptible to pollution, particularly around such premises as are usually found in mill villages, and the cultivated or uncultivated soil of the yard, flower yard, vegetable garden and adjacent to open privies. He stated, also that hookworm disease occurred first in rural districts and mill villages in this country, and that it spreads through the medium of polluted soil, particularly around the home under just such conditions as those suspected in the present discussion. He referred further to that part of the Thompson-McFadden Commission Report, which shows that although women have the disease eight times as often as adult men wherever the sexes are separated during the day, the women remaining and working around the house, and men going out to the fields or to work such as the women do not engage in. Where men and women go alike to the mill, the sexes have the disease in like proportion. In Europe, where the men and women go alike to the field, we find the sexes contracting the disease in equal numbers.

In answer to the inquiry as to why there was little or no pellagra in this country some years ago, if the disease is propagated through the medium of the soil, Dr. Parrish advanced the opinion that the soil was not at that time infected. He calls attention to the fact that there was likewise a time when hookworm was not prevalent in this country. We now have both pellagra and hookworm, and they both came from Europe.

PROGNOSIS OF PELLAGRA.

Dr. W. J. Calvert of Dallas, said that a satisfactory prognosis for pellagra, so varied in its clinical forms, is difficult, even impossible to make. Owing to the tendency of the disease to chronicity, it is impossible, in a particular case, to give more than a most general statement of possibilities.

When by the clinical course, the severe, acute, typhoid-like pellagra has been determined, a grave prognosis is justified. This may, of course, be changed from time to time as the details of the case unfold themselves. In this type of pellagra, the death rate may be from 60 per cent to 75 per cent and in some series, even higher.

When the course of pellagra develops chronicity, the prognosis is much better. In this type, successive attacks may vary—sometimes mild, sometimes severe.

In chronic pellagra, the death rate has been as low as 4 per cent, but the development at any time of a severe attack may change the picture to that of the severe type.

HELMINTHIASIS AT TEXAS STATE ORPHANS' HOME.*

BY

J. H. FREY, M. D.,

CORSICANA, TEXAS.

Shortly after taking charge of the Hospital at the State Orphans' Home at Corsicana, Texas, I began a series of blood counts and examinations of stools for intestinal parasites. As the results may prove of interest to the profession, especially in view of the work now being done by the State Hook Worm Commission, they have been tabulated as follows:

Number of children in the Home	270
Number of children infected with intestinal parasites	118
Per cent infected	47.7

That this does not mean that the State Home is a hot bed for the spreading of intestinal parasites the following will show:

Children admitted in 1912 (examined on admission)	59
Number found infected on admission	29
Per cent of new children infected	49.1
Children admitted during the five years, 1907 to 1912	142
Number infected	61
Per cent infected	42.9
Children admitted previous to 1907 (1895-1906)	69
Number infected	28
Per cent infected	40.5

As will be seen, the older lot of children were freer from infection than the later arrivals. At present the children are examined immediately upon admission, and if found infected treatment is instituted at once. The older cases are being treated a few at a time, as is practicable.

Because of some double infections the total number of cases of worms was found to be 129, the species represented and their percentages are as follows:

Uncinaria	57.6%
Hymenolepis Nana	32.6%
Oxyuris	6.2%
Trichocephalus Trichurius	2.3%
Taenia Saginata	0.7%

The large percentage of the comparatively little known dwarf tapeworm would seem to bear out the prophecy of Stiles, made more than twelve years ago, that "Hymenolepis nana will be found to be the commonest tape worm in the United States."

There were three cases of the rather rare whip worm, one coming from Potter County and two from Galveston. The two latter children were brothers, one entering the Home in 1910 and the other in 1912, so they were both undoubtedly infected before their arrival.

The cases of oxyuris were all in children below ten years of age, with two exceptions, one a girl of 13, the other a boy of 16. The boy showed a very high eosinophilia (37.87) with a large number of eggs, when examined about two years ago. A few months past his stools were re-examined and no oxyuria eggs were found. A second blood count gave an eosinophilia of but 1.82 per cent. He had evidently gotten rid of his infection "spontaneously," as he had had no treatment during the interval.

There was but one case of beef tapeworm, which seems to be a little unusual, the taenia saginata supposedly being a rather common worm. However, this may be partially explained by the fact that children, as a rule, are not large meat eaters.

The sexes of the infected children run pretty evenly, 50.7 per cent of all the children at the Home being males, and of those infected 53.3 per cent are males.

The double infections noticed were:

Uncinaria and Hymenolepis	5
Uncinaria and Oxyuris	1
Uncinaria and Taenia Saginata	1
Hymenolepis and Oxyuris	3
Hymenolepis and Trichocephalus	1
Total	11

As to the distribution of intestinal parasites over the State at large, the attached map may be of some value.

The map shows the counties represented by children at the Home, and also the number and distribution of cases of uncinaria and hymenolepis. However, its value is vitiated by the fact that the counties surrounding and near Corsicana, are represented by a larger percentage of children than those at a greater distance, thus

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making it appear that a much heavier infection exists in these counties.

Number of counties represented	53
Counties showing infected children	31
Counties showing no infected children	22

It will be noted that hymenolepis is present in the Panhandle as well as in the other parts of the state, being even more common than uncinaria.

Regarding the connection between infection and the eosinophiles, it will seem from the following division that an eosinophilia below 2 per cent is almost proof positive that there is no infection, while counts above 5 per cent very nearly always show some parasites, and those above 10 per cent invariably do. The series shows:

	Infected
Eosinophilia from 00% to 2%	None
Eosinophilia from 2% to 5%	23.1%
Eosinophilia from 5% to 10%	81.3%
Eosinophilia from 10% to upward	100%

The group of eosinophilias from 5 per cent to 10 per cent, would, I believe, have shown more than 81.3 per cent of infection if several examinations have been made at different times. While in every case feces were washed and centrifuged before examination, it was noted that quite often only one or two eggs would be found after examining five or six slides (using the mechanical stage,) and sometimes the examination would prove negative. Another specimen taken at a different time would often contain quite a number of eggs. It would thus seem that an eosinophilia of over 5 per cent means helminthiasis in very nearly every case.

It was also noticed that everything else being equal (equivalent percentages of eosinophiles, etc.,) the examination made in the spring and early summer showed a very much larger number of eggs to the specimen than those made in the fall and winter.

The above report was written early in 1913. I wish to add a postscript or two.

The number of children in the Home at the time of writing the report (270) has been increased to 408 at the present time. This is the extreme limit, and there will be no more children admitted until the State can give us more buildings. At this time there are over 275 applications for admission on file. The Home is really overcrowded from a sanitary and hygienic standpoint, though fortunately there have been no deaths for nearly five years. I hope the members of the Association will drop a few good words to their representatives, to help the appropriations for new buildings, especially for a modern hospital, and a dining and administration building.

There has been a noticeable dropping off in the percentage of intestinal parasitic infections in the children admitted recently, especially during the last year. Of 105 admitted in 1914, but 18, or 16.1 per cent showed infection. This is a great improvement over the previous years, and I believe is an argument for, and proof of the great work the State Hookworm Commission is doing.

The other subject I wish to mention, is only indirectly connected with intestinal parasites, and belongs more properly under the head of Vital Statistics.

Beginning January 1st, 1915, Superintendent W. F. Barnett suggested and instituted a "loose leaf ledger" roll of the children. Each child upon admission is given three pages, which are filled out as completely as possible. The first page is the legal application blank, which must be filled before admission, and passed upon by the Superintendent and Board of Directors. This contains all the data obtainable regarding the child from a legal standpoint, etc., etc. The second is a school record and shows the mental status of the child upon admission, and its subsequent school history. This is added to at stated intervals by the teachers. The third sheet is the "Health Record," and endeavors to get as complete a line on the physical development as possible. The blank reads as follows:

"HEALTH RECORD of.....
from.....to..... Admitted.....;
County.....; Age.....;
Family History.....; Father.....;
Mother.....;.....
Personal History: Physical.....
Mental.....
Vaccination.....; Smallpox.....;
Typhoid.....; Blood Examination.....;
Eosinophile, %.....; Intestinal Parasites.....;
Specialist Report.....; Dental Report.....;
Remarks....."

Each time the child is admitted to the hospital a note of cause of admission and date of dismissal is made, and at the end of each month this data is transferred to the health record ledger sheet.

Even in the few months that have elapsed since the idea has been developed, it is seen that some children and some families have less resistance to disease and show up frequently on the record, while others have a clean slate. I cannot help but believe that in a few years this complete record will be of great value, not only in getting a line on the development of the child individually, but also in helping vital statistics, and to stretch a point, eugenics.

It will be noticed under vaccination above, that there is a record of smallpox and typhoid fever. All of the children have been given immunizing doses of typho-bacterin, with practically no reaction following. Probably a half dozen or more showed a temperature of 102° for a short time, but there were no complications and no sore arms. We have had no typhoid fever.

Under the head of Specialist and Dental Reports, anything that may be done in the way of tonsil or adenoid operations, as well as all dental work, are reported as they occur.

I judge it will be interesting to notice the change in school work after adenoid operation, or correction of errors of refraction, etc.

When a child is dismissed from the Home the three ledger sheets are removed from the large book and filed away in another ledger. This makes it possible to ascertain at any time the number of children in the Home and their complete history to date.

The development of the coming generation is a work with which we have a great deal to do. The history and growth of the developing child is a most fascinating subject, and one that should be made more of an every day study.

If there are any suggestions for modifying the Health Records, as reported, or any further improvement in any way, I would be very glad to hear them.

THE FILTERABLE VIRUS.*

BY

DUANE MEREDITH, M. D.,

WICHITA FALLS, TEXAS.

In presenting this paper I realize that I am contradicting the works of the best men in the profession upon this subject. It takes a good deal of courage on my part to do this, but after nearly three years study of several organisms of this group I feel it my duty to give the medical fraternity the benefits of my work.

The filterable virus, as we commonly understand the word, means an organism so small that it will pass a Berkfield filter, and is invisible to the ordinary microscope. Flexner and Noguchi, of the Rockfellow Institute, have attained more tangible result upon this class of organism than any of our investigators. Flexner upon the acute poliomyelitis, and Noguchi upon rabies and trachoma. This latter work has not been generally accepted.

The one man who stands out as our foremost investigator, is Dr. Victor C. Vaughn of Michigan. While I had made cultures of my pellagra organism prior to understanding his anaphylaxis theory, yet his work has greatly aided me in obtaining cultures of others of this class of organisms. There is so little known of this class of organism in any of our standard text-books, that I shall limit this paper more to a report of my work upon several of this group, with theories that I have worked out, based upon the growth and cultural characteristics of those that I have examined. I shall give here a classification of my own, based upon their growth within the body, or upon it, as the case may be.

First, we have that class which grows upon the body and do not gain access to the blood stream except accidentally. This includes numerous skin diseases, such as impetigo contagiosa, trachoma, diphtheria, and probably the eczemas belong to this group, with several others.

The second group contains those organisms that probably gain their access to the body through the respiratory tract, or else is conveyed by the bites of some insect that acts as its host and thus gains access to the blood stream, where they are carried to other parts of the body and develop their characteristic growth in tissue suited for their purposes, and against which specific antibodies are developed by the body. In this class we see the acute exanthemata, acute poliomyelitis, mumps, and many more of our acute diseases.

The third class contains those which gain access to the body by means that are not fully understood, but which after they gain access to the blood stream, are carried to tissues, where they are able to complete their cycle. No antibodies are developed against them, or else they are able to resist the antibodies that are developed, and may carry on their cycle indefinitely. To this class belongs pellagra, rheumatism, and probably pernicious anemia, diabetes and others.

The fourth class is the one that most concerns us, as this class contains our most virulent diseases and the ones in which the least progress has been made in their eradication. The reason for this is because our pathologists have not understood how they developed within the body. The reason they are so hard to eradicate is because they have an independent food supply, as I shall show later, that is independent of the lymph. This class includes benign tumors, malignant tumors, tuberculosis, syphilis, or any other disease that has the formation of new tissue.

This subject is in its infancy, and in the near future, when it is thoroughly understood, it will be of the greatest importance to man. Because an organism can pass a filter at one period of its existence does not mean that it is invisible at all times, as is the universal opinion of our leading scientists of today. This class of organism belongs to the strict saprophytes and are all probably vegetable fungi and amoeba, or so closely allied to them that it will take the future to determine their exact classification. I base this report on the partial study of six of this group of organisms. The reason I think that they are fungi is because they all have practically a double cycle. This applies especially to the exanthemata that I

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*Read before the Section on Pathology, State Medical Association of Texas, Fort Worth, May 6, 1915.

have studied, and the one that I have studied most closely is measles.

I have put diphtheria in the first classification because of its peculiar growth. Some of the filterable virus organisms stain like the diphtheria bacillus. This class of organism gains its nourishment through the power of excreting toxins capable of destroying the cells that they come in contact with, and do not form spores that gain access to the blood stream. This is quite true of vaccine virus, as there are no spores visible, except those in the mycelia. While I have grown the vaccine virus organism from Parke Davis & Co., H. K. Mulford Co. and Alexander & Co., and obtained typical growth in each instance, when they were in pure culture, and obtained the same organism along with contamination, where contamination occurred.

The cycle that I worked out in measles is about as follows: The organism gains access to the patient through the respiratory tract, by the lodgment of a spores on the mucous membrane. Here heat and moisture cause it to begin its growth by sending out fine mycelia, which grow down into the epithelium; these mycelia contain tiny spore like bodies. The mycelias continue to grow and divide until the whole surface is covered with them. When they reach the basement membrane they grow along its base in the lymph channels, where they break off and are carried into the general circulation. Whether the tiny spore are liberated before reaching the blood stream I doubt, as I found typical mycelia in two of my pellagra cases suffering from a high temperature immediately after a chill (from blood smears.) These tiny spores must develop into a tiny spirilla like body, as I was able to detect such bodies in both measles and pellagra, and it is in this state that it is able to pass the stone filter, and is able to pass out of the blood vessels into the surrounding tissue. While this may occur at any place along the blood vessel, there is only one place that they will likely develop, and that is along the basement membrane of epithelial cells. Here they grow as strict saprophytes, by living off of the excretions of the epithelial cells and not the lymph, as is thought. Here the spirilla like body grows into a bacillus like body in chains. Then these break up into separate bodies that look very much like an amoeba, with a nucleus like body within itself and has the power of locomotion. Whether this is due to the streaming of its protoplasm or to a whip, I am not sure, but I think it is the latter which enables it to enter the superficial epithelium cells, where it sporulates very much like the malarial parasite in the blood cell and the trachoma and Negri bodies in the epithelium cells of the eye and the nerve cells. Mallory has observed similar bodies in scarlet fever in the epithelium. With the growth of these bacillus like bodies there is liberated an enzyme, which produces the eruption. This is to enable the amoeba like body the more readily to enter the protoplasm of the epithelial cells. This double cycle has already taken place in the respiratory tract, at about the time they are liberated in the blood with the rise of temperature due to anaphylaxis, hence we may have infection beginning from the first day of fever. The pellagra organism is practically like the organisms of the exanthemata in its cycle, except they are probably implanted in the skin through the bite of some insect and do not liberate a toxin, so that no antibodies are formed against it within the body, or else it is not susceptible to the antibodies. Thus it becomes a chronic disease, as it is able to repeat its cycle within the body many times, and it is the destruction of these organisms within the blood that gives rise to the peculiar condition of pellagra. One may die with pellagra without having had fever.

This class of filterable virus contains probably the most dreaded diseases that afflicts man, *viz,* cancer, tuberculosis, syphilis and the benign tumors. The reason this is true is because the pathology of these organisms has not been understood. I am including tuberculosis in this class, because of its characteristic growth, which is identical with some of this class of organism. I have been unable to obtain a pure culture of tuberculosis, hence I have been unable to carry out the experiments that I wanted to upon this organism to prove that this is filterable, and that in the presence of calcium salts it does form spores within the body that give rise to miliary tuberculosis, when such a lesion breaks into the blood stream. And it is only when there are spores within the blood that metastasis takes place, and only when there is a mass of tuberculous tissue along with the tubercle bacillus, to break into the circulation, sufficient to form an infarct, will metastasis take place.

The fourth class of organism gains nourishment through the power of stimulating certain cells of the body to grow independently of nerve supply or the male element. The function of the small lymphocyte is unquestionably that of a male element that impregnates certain cells, thus bringing about the process of repair as it is required in the body. Whether the organism does this through an enzymic action or by sending fine fibrilla into the protoplasm, stimulating the nucleus direct, I have been unable to determine; but we do know that they are capable of producing this false conception with the formation of new tissue, and it is from the excretions of these cells that the organism gains its nourishment, and not from the lymph

current, as is generally accepted. Thus this class of organism has a saprophytic food supply that is entirely independent of the blood current. Hence, making it next to impossible to eradicate one of them, and it is only by building up the patient's body cells to resist the phagocytic properties of these cells that we are able to overcome them.

The cancer organism never gains access to the body except accidentally through wounds, and can develop only in tissue rich in the by products of rapid growing cells that have poor drainage. This we see in the process of repair after wounds, in embryonic tissue in the embryo, or in benign tumors undergoing myxomatous degeneration. Cultural characteristics are as different among this class of organism as any other known to man. The reason they have not been recognized before is because of the lack of suitable culture media to grow them upon. I owe the discovery of this media to Parke, Davis & Company, who prepare their blood serum in a hermetically sealed tube before sterilizing. When this is done it leaves about one c. c. of clear fluid above the coagulated serum, that is rich in proteids. By drawing some blood from the cephalic vein and planting upon this media, dilution is such that the organism can grow, and it usually grows down into the solid media. They all seem to take on a more virulent growth after two or three generations on artificial media, and then will grow on the surface as well as in the media. My cancer organism grew well in this blood serum mixture. After some two months one could easily see a growth. Some of the others will only grow on ascitic agar. This is especially true of vaccine virus and trachoma. In fact, I have not had a failure in fixing media that would meet the saprophytic condition where the organism grows best. In my culture of the measle organism I use a blood serum coagulated in an Erlemyer tube, this covered with a thin coating of nasal mucous, and all of it covered about one-half inch deep in glucose bouillon.

I have been able to fulfill Koch's law in trachoma and pellagra, as I now have an infected monkey with pellagra, and trachoma I succeeded in growing in a young rabbit's eye. I have obtained growths from measles, scarlet fever, smallpox and rheumatism by blood culture, and have been able to grow the same kind of an organism from the vaccine points of Mulford, Alexander and Parke, Davis companies. I have also been able to get growths from carcinoma some sixty days after planting, and also from a monstrosity, which leads me to believe that I am working with the right organism.

Can you tell, off hand, how many surgical instrument houses advertise in *your* JOURNAL?

REPORT OF CASES: FOREIGN BODY IN MASTOID CELLS; FOREIGN BODY IN LEFT BRONCHUS.*

BY

W. D. JONES, M. D. AND H. B. DECHERD, M. D.,

DALLAS, TEXAS.

FOREIGN BODY IN MASTOID CELLS.

The patient, a male, age 14. Father dead, mother living and in good health. One brother living in good health; one sister living and one dead from ear trouble, following scarlet fever at the time the patient had scarlet fever. Past illness: Had measles, whooping cough and probably scarlet fever ten years ago, from which time his present trouble dates. The mother says that at the age of four years he had fever with some eruption; both ears began to ache and discharge, and have continued to discharge more or less since. In November, 1912, the right ear was operated on and the wound behind the ear never did heal for more than two weeks at a time, the ear discharging continuously.

Examination August 5th, showed the following condition: Temperature 99° F., pulse 84; discharge from both ears, odor very foul from the right ear. There was a swelling behind the right ear, most prominent over the mastoid antrum, and a sinus leading down to the bone, which was also discharging, but much thinner than from the auditory canal. The swelling behind the ear was red and angry looking. Lymphatic glands over the tip of mastoid and posterior cervical region were enlarged. The hearing in the right ear, C tuning fork; air conduction 10 seconds; bone conduction 30 seconds. Left ear, air conduction 12 seconds; bone conduction 30 seconds.

Examination after irrigating the ears showed the right drum membrane destroyed, and cholesteatomatous material could be seen in the attic. The left drum membrane was destroyed, and the middle ear full of granulations.

On August 7th, a radical mastoid operation was performed, the incision being made through the old scar and sinus. After retracting the periostium, found that a cortex over the antrum, about the size of a dime, had been removed, and after enlarging this opening so that the cholesteatoma might be removed *en masse,* a strip of gauze was found, about five inches in length, which had constituted what was taken to be a cholesteatomatous mass, and which had been there since the original operation, nineteen months before.

Four weeks later the adenoids and tonsils were removed, and the patient was sent home in

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seven weeks in good condition, the middle ear partially epidermatized. He reported at my office last week for examination, and I found the ear had stopped discharging and was completely epidermatized.

REMOVAL OF UPHOLSTERER'S TACK FROM THE LEFT BRONCHUS OF A FOUR YEAR OLD CHILD.

On February 28, 1915, A. F., female, colored. aged four, while sitting on the floor laughing and playing with a puppy suddenly drew some sort of a foreign body into her respiratory tract. Being of more intelligence than the average negroes, the parents at once suspected something wrong, and the next day consulted Dr. E. S. Gordon of the Southern Methodist University Clinic. Although the child manifested but few symptoms, Dr. Gordon found the left lung seemingly consolidated. He at once took the patient to Dr. Robert Millwee's office for *x*-ray examination. A large tack was easily seen by means of the fluoroscope; it is also well shown in the radiograph made at the time by Dr. Millwee.

As the *x*-ray table was not well suited for bronchoscopic work through the larynx, a high tracheotomy was made, and under fluoroscopic direction from the outside, a 40 cm. forceps (Jackson's) was passed through the 5 mm. bronchoscope (Jackson's) and the tack removed in two or three minutes. For safe keeping, the patient was kept in the hospital for a few days. A degree or two rise in temperature was noted for three days. The lung had cleared up in four or five days and the patient was dismissed well.

The accompanying cut shows position and shape of tack and collapsed condition of the left lung. There was not a true pneumonia present, as was evidenced by the rapid recovery. Getting the patient next day after the accident was of prime importance in the successful result. The tack is a very rusty one and the head is slightly bent upon the shank. This latter condition is easily seen in the skiagraph.

CHRONIC PURULENT OTITIS MEDIA AND COMPLICATIONS: REPORT OF CASES.*

BY

HORACE T. AYNESWORTH, M. D., F. A. C. S.,

WACO, TEXAS.

Chronic discharging ears often date from childhood and give a history of having followed one of the infectious diseases; or the trouble may have had a less serious cause, such as a bad cold. In those cases with a mild beginning, recovery is usually prevented by local conditions, such as nasal obstruction, tonsils and adenoids, etc., or by a combination of these with a lowered or depressed systemic state. The more serious cases are usually associated with bone necrosis, cholesteatoma, obstructed drainage, or other complicating factors. The patient may, or may not, suffer much inconvenience. To the deafness he has often become more or less accustomed. The discharge may not be sufficient to arouse him or his friends, or he may have become callous to it. He may have an occasional acute exacerbation that for the time being stirs him into action sufficiently to seek the advice of his physician, and to follow this advice for a while, but with the passing of the acute attack he returns to his former ways and forgets that he is, figuratively speaking, sitting upon a powder magazine and that careless hands are always near, ready to light the match that may cause the explosion. However, not all the fault must be laid at the door of the patient, for the physician himself sometimes underestimates the gravity of the condition and fails to warn the patient in sufficiently strong terms.

As to the symptoms, other than those already enumerated, they vary quite a deal in different cases and at different times in the same case. During the quiescent period the discharge and deafness, both varying in amount, may be practically the only symptoms. The deafness may be complete if the cochlea has become involved. The pus often has a foul odor, due in part to stagnation, but also to destruction of bone, to cholesteatoma, etc. The membrana tympani practically always shows marginal destruction. The exceptions to this are seen in the milder cases, especially those kept up by nasopharyngeal conditions, as tonsils and adenoids in children. This destruction of the membrana tympani may involve varying degrees up to almost the whole of the membrane. Other conditions seen in the ear may include granulations, bloody discharge, polypi, bare bone, necrosed ossicles, etc. During the acute exacerbations the mastoid may become painful and tender over the antrum and tip, or it may not. A condition that has very much impressed the writer recently is the sclerosed state of the whole mastoid, so often found. This will account for the absence of subjective mastoid symptoms. I would stress this point, especially to the family physician, for we have been taught to look for pain and tenderness over the mastoid in mastoiditis. Mastoid fistulae, etc., are seen in certain cases. Headache is usually present in the acute stage and may be present also during the quiescent periods. A muddy complexion, coated tongue and foul breath, are also usually seen here as in other chronic intoxications. Fever and quickened pulse usually accompany the exacerbations. But to the

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intracranial complications do we look for the most urgent and grave symptoms. The disease may spread directly to the cranial cavity posteriorly or superiorly or only after having invaded the inner ear. The complications met include extradural abscess, meningitis, sinus thrombosis and brain abscess, each with its varying modifications and clinical course. Extradural abscess can not be positively diagnosed before operation, but an exaggeration of the usual symptoms of mastoiditis, with excessive tenderness at the posterior border of the mastoid at the point of entrance of the mastoid emissary vein, suggests this complication. The usual symptoms of meningitis, such as violent headache, photophobia, restlessness, contracted pupils, Kernig's sign, retracted head, nausea, vomiting, fever more or less continuous and high, fast pulse, etc., herald this complication and indicate its severity.

A certain amount of localized meningitis possibly occurs in every intracranial complication, but the above picture is seen where the meningitis dominates the condition. Infective sinus thrombosis, usually of the sigmoid portion of the lateral sinus, at least in the beginning, has, as a rule, the most characteristic and easily recognizable clinical picture of any of the intracranial complications. Here we have a chill, often very severe, followed by high fever (up to 104 degrees F. or higher) and profuse perspiration. This sequence may be repeated two or three times a day, and is followed by emaciation, weakness and rapid decline. Headache and tenderness at the posterior border of the mastoid, and below the mastoid, may be present. A characteristic blood picture, a bacteremia, a high leucocyte count with a high polynuclear percentage, helps to clinch the diagnosis. Some cases however, run an atypical course, similar to typhoid-fever, or other grave and debilitating disease. The condition rapidly progresses from bad to worse, and if immediate attention is not given the case rapidly becomes very unfavorable. Some cases of recovery after lateral sinus thrombosis are reported, however, but they are about as hopeless without operation as any we are likely to meet with.

Brain abscess, more than any other intracranial complication, may baffle diagnosis, since it often remains latent for months and possibly years. On the other hand, the typical cases present a symptom complex easily recognized, or at least surmised, by the expert. The detailed symptoms will not be gone into here, but some of the suggestive symptoms are headache, vomiting, slow cerebration, restlessness, irritable temper, slow pulse, normal or subnormal temperature except in the beginning or with the spread of the abscess to a new location; coated tongue, foul breath, constipation, loss of appetite, a moderately high blood count, etc., are also present. A hyperemia of the optic disc, an actual optic neuritis or even choked disc, may be seen in these intracranial complications, but more often (especially choked disc) in brain abscess. It is to be remembered also, that often the clinical picture is more or less obscured by the presence of more than one of the complications mentioned.

It can not be said that every chronic running ear is a distinct menace to its possessor, but certainly many of them are. A certain percentage, especially in children and young adults, will clear up if the nose and throat are put in good condition. This includes the removal of adenoids and tonsils, straightening deflected nasal septi, reducing enlarged turbinates, removing diseased tubinates, curing accessory sinus disease, etc. After this is accomplished a certain number of cases remaining uncured can be made to dry up by thorough and painstaking local treatment plus any constitutional treatment deemed necessary. But there will still remain a large number of cases that will not be cured by such means. This is owing to the presence of diseased bone, cholesteatoma, adhesive bands and the like, preventing proper drainage, tuberculous infection, syphilitic infection, etc. For such cases I would urge early operative interference. This, of course, means the radical mastoid in most instances.

I have previously reported some cases of this nature operated upon with reasonably good results. I now wish to report two cases, in which, owing to the complications present and the stage of the disease in which I was forced to operate, good results could not be secured.

Case 1.—E. L., male, age 17, on August 12, 1913, came in with a history of O. M. P. C. of the right ear, mouth breathing and frequent colds and sore throat. Diagnosis: O. M. P. C., right ear, deflected nasal septum, adenoids and tonsils. A submucous resection of the nasal septum was performed, and a radical mastoid on the diseased ear was advised. The advice was not accepted. On September 25th, 1914, he returned, on the advice of his physician. For the previous three weeks he had fever; for the past eleven days, on an average of two chills a day, followed by fever up to 104° F., and higher succeeded by profuse perspiration. He had lost much in strength and appetite and had considerable headache, a coated tongue and foul breath. There was a very profuse discharge from the ear, but no mastoid pain and no tenderness. However, just below and in front of the mastoid tip was a large swelling, with fluctuation. The blood count showed 22,000 leucocytes, with 90 per cent polynuclears. The urine was normal.

Operation: The mastoid was quite dense throughout. On exposing the dura, a large amount of foul pus escaped, through a perforation just anterior to the junction of the middle and lower third of the sigmoid sinus. The sigmoid sinus was opened and found to be full of pus. The internal jugular vein was divided between ligatures, just above the facial vein. The outer wall of the sigmoid sinus was removed until fairly free bleeding was obtained above, but not below. On account of the condition of the

patient the radical operation was not completed. The patient rallied very well from the operation and never had another chill, but his general condition did not improve. On September 28th, three days later, he was again put on the operating table. The lateral sinus was followed about 1½ inches further posteriorly, allowing the discharge of a thin pus, but no clots. The sinus seemed to be open all the way back, but no flow of blood was secured. The abscess in the neck was drained and the patient returned to bed. He continued in a profoundly septic state, gradually growing weaker, losing his appetite and strength, and died four days later.

The chills and fever in this case had at first been thought by the physician in charge to be malarial in character, for which quinine was administered. The physician felt justified in this diagnosis because of the absence of pain and tenderness in the mastoid and on account of the course of the disease. The absence of mastoid symptoms was easily accounted for by the sclerotic state of the bone, a condition often encountered in O. M. P. C. Had it been possible to operate on this patient in the beginning of the sepsis, or better, at any time before it set up, he would have had a much better chance to recover, in fact, should have done so.

Case 2.—C. H., age 23, male, white. This patient was brought to me by Dr. B. W. D. Hill, of Dawson, with the following history: For about two years he had suffered with a running left ear. About sixteen days ago he had suffered headache, vomiting, etc., and had called Dr. Hill in. In the absence of any prominent ear symptoms (the patient did not speak about his ear on this visit, and Dr. Hill did not know that he had been a sufferer from ear trouble), it was thought that the condition was probably one of typhoid. On account of business elsewhere in the State, necessitating his absence from home and professional duties, the doctor did not again see his patient for two weeks, when he found him dull and stupid, with very little fever, pulse around 60, headache posteriorly and on the left. He was constipated, had coated tongue and foul breath. He had not had a chill before entering the hospital, but did so shortly afterward, before the operation. Blood count, 30,000 white; 95 per cent polynuclears.

Operation: Radical mastoid. Again the mastoid was found sclerosed. Sigmoid sinus was far forward. On exposing the dura, pus was freely discharged through a large fistulous tract, with necrotic walls over the region of the sigmoid sinus. Gentle probing could not detect any continuity with the sinus, hence it was thought that a partially organized clot in the sinus had broken down in its central part. The clinical history had led me to believe there had been no suppurating sinus freely discharging into the circulation, but rather a brain abscess. A large cholesteatomatous mass filled the antrum and aditus. The patient left the operating room in a bad condition, but rallied. For four days he improved rapidly, and I thought he would soon be able to leave the hospital. Suddenly, however, he became nauseated, had some headache and lost his appetite. This lasted two days, when consultation was requested. Dr. Hill came over, but about the time the doctor arrived the patient took a turn for the better, and we decided that the alarm had been a false one. The blood count, however, showed 22,000 white cells, with 90 per cent polynuclears. The improvement was of short duration. Suddenly, on the 25th, after very little warning, save a severe headache some time before, he quit breathing. Artificial respiration kept him alive for an hour and a half, but nothing availed to stimulate the respiration.

Had circumstances permitted a close and continuous watch on this case from the beginning of his serious illness, a much earlier diagnosis could and would have been made, as his attending physician is a conscientious, well trained man. An early operation would perhaps have forestalled the severe complications not removed by the operation, and so saved the patient.

In conclusion, I would urge an earlier appreciation of the possible serious consequences following untreated O. M. P. C. When the graver complications supervene, the case becomes much less favorable and often hopeless.

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DEPARTMENT OF EXTENSION*

PREVENTION OF TYPHOID FEVER AND CARE OF THE TYPHOID PATIENT.

Typhoid fever is a disease affecting the entire body and caused by typhoid germs which circulate in the blood, reaching every organ, and attempting, as it were, to find a resting place where they may multiply. The human body possesses such excellent protection, however, against the germs, that in the vast majority of instances they are eventually thrown off. It usually takes the body from two to six weeks to get the situation under control. Even after the patient entirely recovers, living typhoid germs may remain in certain parts of the body. These typhoid germs, which are left over, seem to be powerless to injure the person carrying them, but may set up the fever if they get into another individual.

Millions of typhoid germs can be found in the urine and body waste from typhoid patients. After being cast off from the body the typhoid germ can live for many days. It lives in a moist place, as, for instance, in streams or pools, in moist earth, or in milk.

Flies lighting on the unclean matter sometimes thrown out of the sick room by careless persons, may get the germs on their feet and thus convey them to the kitchen or dairy. A rain may wash the germs from the ground into the well or spring. Persons who have had typhoid fever, may, after they recover, continue giving off the living typhoid germs and thus spread the disease.

If possible, there should be a trained nurse to attend the typhoid patient. If this is not practicable, then certain relatives and neighbors may divide this duty between them, always preserving a clear idea as to who is responsible at any given hour. Whoever is on duty should keep an accurate record of the patient's temperature, of the food and medicine given, of the sleep and bodily functions of the patient, and any other data desired by the physician. Some one person should have charge of the case and see that all the doctor's directions are understood. All the directions of the physician regarding baths, diet, etc., should be conscientiously carried out to the letter.

Company should be excluded from the sickroom. A bowl of antiseptic solution, made by dissolving one seven grain bichloride tablet in a quart of water, should be kept in a high place out of the children's reach, ready for rinsing the hands of all persons who touch the patient or the bed. The patient's soiled linen and bed linen should be rolled into a bundle and dropped into a clean pillow case or laundry bag, and not handled until after boiling. The floor should be mopped rather than swept, so as to avoid raising a dust, and the furniture should be wiped with a moist or oiled cloth. The door knobs should be cleansed daily with the bichloride solution. The patient's eating utensils should be kept separate from those of the family and should be boiled after using.

To disinfect the patient's body wastes, make up a mixture of four tablespoonfuls of cresol or suitable cresol preparation, to the gallon of water; shake well; receive the body wastes into a bedpan containing a half pint of this disinfectant solution, then add more until the bed pan contains equal parts of body wastes and disinfectant; set aside for half an hour; empty into a sewer, but never into an open closet. If necessary, dig a hole two feet deep at least one hundred feet from the well and on the down-hill side; empty wastes into this hole, and excludes flies by a lid made of wire gauze or boards, or fill the hole with the excavated dirt immediately the waste is emptied into it.

The sick room should be screened, and if this is not practicable a mosquito bar should be used over the bed.

Anti-typhoid vaccination is sometimes advised by the physician and the question should be left for his decision as to whether it is needed in any given instance.

It should be remembered at all times that the fever will run its course in a few weeks; and even if the patient's condition grows serious hopefulness and careful observance of the doctor's directions will tend to bring about convalescence.

*Newspapers and other publications reaching the great lay public, are invited to republish articles appearing in this department. The main object of these articles is to educate the public on matters pertaining to health.—THE EDITOR.

A SIMPLE TRAP FOR THE HOUSE-FLY.

A maggot trap which will practically prevent the breeding of the house-fly is described in a new bulletin of the United States Department of Agriculture, No. 200, "A Maggot Trap in Practical Use; An Experiment in House-Fly Control." The investigators who carried on this experiment at the Maryland Agricultural College declare that during August and September at least 98 per cent of the larvae breeding in the manure were destroyed, and although the trap was not so efficient when the weather became colder, even then it greatly reduced the number of flies.

The principle of the trap is simple, it is easy to construct, and the expense is said to be probably less in the long run than the investment which many farmers now make in screens for their dwellings, and sprays and fly-nets for their live stock. In its roughest outlines the trap consists of a concrete basin with a latticed wooden platform erected upon it to hold the manure. The basin is connected by a drain pipe with a small concrete cistern. The bottom of the basin is filled with water into which the maggots breeding in the manure drop, as they are about to turn in the pupa or chrysalis stage, and are drowned. At frequent intervals the water is run off into the cistern and is then pumped back on the manure pile. In this way all the liquid manure is saved.

The successful operation of this trap rests upon several facts connected with the habits of the house-fly which have been thoroughly established by observation. The adult fly lays its eggs in fresh manure. There they remain until the larva stage is almost over and the insects are about to enter the pupa or chrysalis stage. At this time a pronounced

tendency to migrate is evident. In consequence, if the manure is placed upon a platform with a lattice-work bottom the larvae, while migrating, will fall through these openings into the water in the basin below. In the case of the experiments at the Maryland Agricultural College a careful count showed that between July 25 and October 1 about 112,000 larvae were killed in this way. This, however, does not include the number that were picked up from the basin by sparrows or poultry. Altogether it is estimated that during the warm weather the efficiency of the trap was probably 99 per cent. Later, when the temperature was lower, the trap's success was not so marked. This was accounted for by the fact that when the air is much colder than the manure heap the larvae will not attempt to leave the heap and therefore will not fall into the basin.

Another difficulty experienced, arose from mosquitoes using the water in the basin and the cistern to breed in. This was overcome by cleaning out the basin at regular intervals and by sprinkling a little oil over the surface of the water in the cistern.

Properly constructed, such a trap offers no obstacles to the convenient and economical handling of manure. It is essential, however, that each day's addition to the heap should be sprinkled with sufficient water to keep the manure moist but not enough to cause leaching. The details of the construction of the trap are contained in the bulletin already mentioned. This particular trap was designed to hold the manure produced by three horses for three months, but there is no reason why larger quantities should not be treated in the same way, by building larger traps or by building several of smaller size.

BORAX WILL PREVENT THE TYPHOID FLY FROM BREEDING.

As a result of experiments, the specialists of the Department of Agriculture have discovered that a small amount of ordinary borax sprinkled daily on manure, will effectively prevent the breeding of the typhoid or house fly. Similarly, the same substance applied to garbage, refuse, open toilets, damp floors and crevices in stables, cellars or markets, will prevent fly eggs from hatching. Borax will not kill the adult fly nor prevent it from laying eggs, but its thorough use will prevent any further breeding.

In the case of garbage cans or refuse piles, 2 ounces of borax or calcined colemanite, costing from 5 cents a pound upward, according to the quantity which is purchased, will effectually prevent flies from breeding.

While it can be safely stated that no injurious action has followed the application of manure treated with borax at the rate of .62 pounds for 8 bushels or even larger amounts in the case of some plants, nevertheless borax-treated manure has not been studied in connection with the growth of all crops, nor has its cumulative effects been determined. It is therefore recommended that not more than 15 tons of the borax-treated manure should be applied per acre to the field. As truck growers use considerably more than this amount, it is suggested that all cars containing borax-treated manure be so marked, and that public health officials stipulate in their directions for this treatment that *not over .62 (62/100) of a pound for 8 bushels of manure be used*, as it has been shown that larger amounts of borax will injure most plants. It is also recommended that all public health officials and others in recommending borax treatment for killing fly eggs and maggots in manure warn the public against the injurious effects of large amounts of borax on the growth of plants. Purchasers of manure produced in cities during the fly-breeding season should insist that the dealers from whom they purchase give them a certified statement as to whether or not the manure in the particular car or lot involved in the purchase has been treated with borax.

In feeding to hogs garbage that contains borax care is also recommended, especially when the animals are being fattened for market. Borax is not a very poisonous substance and the feeding of garbage that contains it to hogs, is not likely to be a serious matter. On the other hand, borax in large quantities does produce gastric disturbances, and for this reason a certain amount of care is advisable.

The method for using this substance in the case of stables is to sprinkle the borax or colemanite in quantities given above, by means of a flour sifter or other fine sieve, around the outer edges of the pile of horse manure. The manure should then be sprinkled immediately with two or three gallons of water to eight bushels of manure. It is essential, however, to sprinkle a little of the borax on the manure as it is added daily to the pile, instead of waiting until a full pile is obtained, because this will prevent the eggs which the flies lay on fresh manure from hatching. As the fly maggots congregate at the outer edge of the manure pile, most of the borax should be sprinkled there.

The details of the experiments with borax and other larvacides will be found in U. S. Department of Agriculture Bulletin No. 118.

THE COST OF TUBERCULOSIS AND TYPHOID.

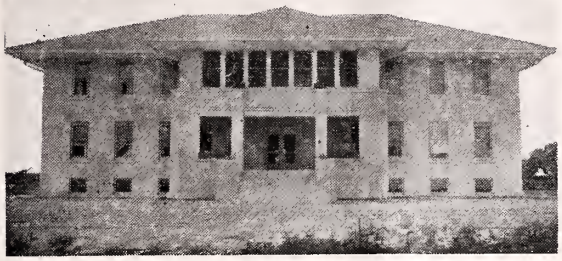
Estimates regarding the loss caused by preventable diseases are always interesting, although necessarily general. The smaller the area affected, the more accurate are the figures apt to be. Prof. Irving Fisher's estimate, in his report on national vitality, of the economic loss for the entire country at one and one-half billion a year is familiar to students of public health conditions. An estimate recently issued by the Minnesota State Board of Health shows the economic loss from death from typhoid fever in Minnesota in the last six years to be $21,958,940, while the deaths from tuberculosis are six times as great and the loss three times as great as that from typhoid, or $66,583,320, making a total loss from the two diseases alone of $88,542,260 for six years, or an annual loss of $14,757,043. In making this estimate the following economic values were used in computing the financial loss from deaths; professional, business men and farmers, $500; skilled laborers, $300; unskilled laborers and domestics, $200; married women, $200; children under 15 years of age, $100. These valuations are conservative, in the opinion of *The Journal of the American Medical Association*, and should represent the minimum rather than the maximum loss.

THE KLEBERG COUNTY HOSPITAL.

The main building is of reinforced concrete, is fireproof and has a basement and five stories above ground. It will accommodate 35 patients. In the basement is the kitchen, pantry, storeroom, dining room, janitor's room, laundry, furnace room, laboratory and *x*-ray rooms. The first floor has six small wards, office, reception room, dish kitchen, store room and closets. The second floor has eleven private rooms, operating room, sterilizing room and surgeons' wash room, with shower bath. Each floor has two bath rooms, lavatories and toilets. There is an electric passenger elevator and a dumb waiter.

The equipment and furnishings are good. The *x*-ray is very complete, and one of the most modern.

The tuberculosis and contagious cottages, are of frame, three rooms and bath each, with large screened porches. The buildings are on one block of



THE KLEBERG COUNTY HOSPITAL.

ground which will soon be filled and set with grass. Walks and driveways are to be provided.

The board of directors are: Drs. Hendery Allison Glen Bartlett and M. E. Miles, Mrs. G. E. Sims and Max Dover. Mrs. Lena C. Shenners, formerly Superintendent of Fort Worth University Hospital, is Superintendent. Besides Mrs. Shenners there are three nurses.

The management has contracted to care for the business of the St. Louis, Brownsville and Mexico R. R. Dr. Shelton, Chief Surgeon for the road, has removed to Kingsville from Corpus Christi, where all cases were formerly sent.

The hospital was built following a bond issue of $35,000, voted for the purpose. Mr. Atlee B. Ayres of San Antonio, was the architect in charge.

MISCELLANEOUS

RULES GOVERNING TRI-STATE GOLD MEDAL COMPETITION.

The Tri-State Medical Society (Ark.-La.-Tex.), which will hold its next annual meeting at Marshall, Texas, December 14-15th, offers three gold medals for the three best papers on some original work, by physicians or surgeons of Arkansas, Louisiana or Texas. The following rules will govern the competition.

Any reputable physician residing in Arkansas, Louisiana or Texas, may present a paper on any medical or surgical subject or the allied branches.

The title of the paper must be in the office of the Secretary not later than November 15th.

Literary composition as well as subject matter, shall govern the decision of the judges.

The time limit for presentation of papers shall be ten minutes, except by unanimous consent of members present at the time.

W. G. HARTT, President.
J. M. BODENHEIMER, Secretary.

A CASE SIMULATING BERI BERI.

DEAR DOCTOR: Apropos the present agitation concerning "deficiency," diseases, pellagra, beri beri and scurvy, I wish to report a case which mimicked beri beri somewhat, with a view of ascertaining whether beri beri has been found in private practice in Texas.

In brief, the illness came on a 17 months old girl just three months after she had been weaned. Her diet in the meantime was exceedingly monotonous, consisting for the most part of a certain proprietary breakfast food, with milk form the family cow, Two weeks before the onset of the illness, which was a multiple neuritis, the girl had an atack of ileocolitis of two weeks duration. She at no time had sore throat.

The presenting symptom was, difficulty in locomotion. Having previously been able to walk up and down stairs, the child lost the power to rise from the floor. Within a few days she had a symmetrical bilateral quadriceps extensor paralysis and symmetrical deltoid paralysis. One day later she had a slight dysphagia, even when swallowing water. At this stage, I gave 7,000 units diphtheria antitoxin and placed the patient on an egg, fruit and vegetable diet. Improvement was perceptible by the end of two weeks, and recovery was steady and complete.

I would be glad to have an expression as to whether or not this was beri beri.

Very respectfully,

L. B. BIBB.

July 25, 1915.

A PECULIAR TRANSACTION.

DEAR DOCTOR: I want to relate a very peculiar experience, which may serve some other physician.

On Monday, May 10th, a man walked into my office introducing himself to me as Dr. H. C. Lyall of Clareville, Texas. Said he understood I wanted to sell my tuberculosis sanatorium. It being true that I did and do want to sell the sanatorium I was interested and on the following Friday we closed the deal, he giving me his check for $1,000 on the Beeville Bank and Trust Company of Beeville, Texas, as forfeit money. It soon developed that he had no account with said bank, and later that no man by such name ever had lived at Clareville, Texas.

He disappeared from San Angelo on Tuesday night, May 18th. On investigation I find he registered at the Landon Hotel, San Angelo, as H. C. Lyall, Denison. He forgot to pay his hotel bill and left his baggage. In his suitcase was found some laundry marked "J. M. W." I have continued my investigations until I am convinced that he is the same man who stopped a few months at Stephenville, Texas, and a few weeks (a little later) at Clareville, Texas, under the name of J. M. Warren.

He is a small blonde, clean shaven, I suppose about 45 years of age. Has staggering gait as if afflicted with locomotor ataxia. In fact, he told me he had "an arrested case of locomotor ataxia." Another item in his description is that he wears glasses and has made a reputation as an excellent hand at misrepresentation.

If this is worth anything, you are welcome to the information.

Yours fraternally,

T. K. PROCTOR.

San Angelo, Texas.

TEXAS AND THE SOUTHERN MEDICAL ASSOCIATION.

The great state of Texas has a way of doing big things whenever she undertakes any enterprise. Her State Medical Association is perhaps the greatest medical organization in any state in the Union, and its Journal, under the able editorial management of Dr. Holman Taylor, is surely one of the best, if not the best, state medical journal published. The recent meeting of the Texas State Medical Association at Fort Worth was, in the eyes of a visitor, a remarkable occasion, having had an attendance of 1,007 of its 3,600 members, and with a program of scientific work which compared favorably with that of any national meeting of physicians. To the Texan, however, it was an average meeting both in attendance and in the character of the papers read and discussed. The entertainments provided by the medical profession of Fort Worth were on the same grand scale, and altogether the occasion was one long to be remembered.

Texas has undertaken the entertainment of the Southern Medical Association in November, and from the enthusiasm manifested at the Fort Worth meeting it is evident that the united medical profession of the Empire State of the South is with Dallas in preparing for the greatest gathering of Southern physicians ever before assembled. President Oscar Dowling, ex-President Frank A. Jones and Secretary-Treasurer Seale Harris attended the meeting and were invited to address the Association. Each of them told of the aims and purposes of the Southern Medical Association, of its wonderful growth and of its hopes for the future. The Texas delegation at Richmond promised 1,000 new members for the Dallas meeting and from the results already attained by the Texas Committee on Membership, with Dr. O. M. Marchman, of Dallas, as chairman, and with local committees in each city, town and county, the Lone Star State will have 1,500 members of the Southern Medical Association before the 1915 meeting ends

The Dallas committee, with Dr. E. H. Cary as General Chairman, and with such men as Drs. S. E. Milliken, J. O. McReynolds, James H. Smart, M. E. Taber, A. B. Small, Turney White, C. M. Rosser, H. M. Doolittle, E. Dunlap, J. R. Worley, J. S. Turner and O. M. Marchman, on the various committees, the arrangements and entertainments planned will equal those provided by any American city for any convention.

Dallas, with its splendid hotels, its magnificent public buildings and with a public-spirited citizenship that is accustomed to entertaining great gatherings, is an ideal convention city, and the plans and preparations for November presage a great meeting for the Southern Medical Association.

Texas has a number of great cities, and while there is a healthy rivalry among them, they all pull together for Texas. The physicians in Fort Worth, Houston, Galveston, San Antonio, Austin, Waco and in the other cities and in every town and hamlet of the Lone Star State are as enthusiastic over the Southern Medical Association as those in Dallas, and they are just as much interested in making the coming meeting a success as if it were to be in their home towns.

The officers of the Sections on Medicine, Surgery, Eye, Ear, Nose and Throat and Public Health report that their work is almost completed and there can be no doubt of wonderful scientific programs in all of the sections. The Southern States Association of Railway Surgeons will also attract many of the leading railway surgeons of the South to Dallas. Among those who are expected to attend the Dallas meeting of the Southern Medical Association are Surgeon General Gorgas, of the United States Army; Surgeon General Braisted, of the United States Navy; Surgeon General Blue, of the United States Public Health Service, and Dr. Cary T. Grayson, President Wilson's physician. It is not possible in an editorial to mention all of the distinguished physicians who are on the program and who will be at Dallas, but every Southern city and state will be represented by their leading men in all lines of work.

The growth of the Southern Medical Association has been phenomenal. Four years ago there were less than 300 members from six states, today it has a membership of more than 4,000, and before November there will be 5,000 members. Every indication points to an attendance of at least 2,000 at the Dallas meeting. The wonderful growth and development of the Southern Medical Association shows that the physicians of the South are alive to their opportunities and that they intend to do more than their part in solving Southern health problems.—*Southern Medical Journal.*

FRACTURES; SUITS; X-RAY PLATES.

It has become absolutely necessary for every physician to exercise the utmost caution in treating a case of fracture. A large percentage of suits for alleged malpractice are based upon cases where a fracture has been treated. It is essential that the physician take an *x*-ray plate of the fracture, preferably both before and after setting, *and keep the plate!* Failure on the part of the physician to take this simple precaution, has cost the society close upon $5,000, most of which would have been saved had proper *x*-ray plates been taken and kept by the attendant. On this account the House of Delegates authorized the Council to make a just rule covering this point, in connection with the medical defense work. The Council has ruled that each such suit will be considered separately and on its own merits, but that unless it can be shown by the member sued that it was well nigh impossible for him to have an *x*-ray taken, he must defend the suit himself and pay for his own carelessness. The basic principle of the rule is sound; it is not fair to permit one careless member to cause a great expense to all the other members. Ninety-nine times in a hundred, it is quite possible to have an *x*-ray plate made, either before or after setting—or both, and the protection secured is enormous. The Council wishes and intends to be absolutely fair to all in its administration of the heavy burden placed upon it by the society in the guidance of this medical defense work; but in doing so it does not wish to permit any member, through his own fault, to be an expensive burden to the whole society.

Always have an x-ray taken of your fracture cases—and keep the plate; do not give it to the patient. —California State Journal of Medicine.

USING THE MEDICAL PROFESSION AS AN ADVERTISING AGENCY.

The Journal of the American Medical Association has called attention repeatedly to the way in which the medical profession has been used by the exploiters of proprietary medicine for the purpose of introducing their wares to the public. "In the past, one of the cheapest methods of putting a 'patent medicine' on the market," says *The Journal*, "has been to call the stuff an 'ethical proprietary,' advertise it exclusively in medical journals (whose advertising rates are much less than those of newspapers), freely sample the medical profession, put up the product in packages that are plainly intended to give the public all the information that may be necessary—and let time do the rest. And time has done it. When physicians have awakened to the fact that they have once more been used as tools, and the preparation is very plainly nothing but a nostrum, then the shrewd manufacturer turns his back on the medical profession and goes over openly to the place he belongs—the public press. The Advertising Association of Chicago, in its weekly bulletin for January 4, 1915, prints a letter that has been received by an American advertising man from a German firm that wanted to place a medicinal product on the American market. One paragraph in the letter bears on the matter under discussion. Here it is:

" 'We beg to mention that the preparations are to be puffed in the first rank and principally so that the physicians (doctors) get acquainted with the same, and it is not necesary to puff them *for the present* in other classes of the public.'

"We have italicized the three words that have a special significance. Put more crudely, the proprietors of this preparation say: Advertise it at first exclusively to physicians and after they have brought it widely to the attention of the public,

then it will be time enough for us to advertise it direct to the public. How long is the medical profession going to retain its unenviable distinction of being a huge advertising agency for the nostrum exploiter?"

THE DRINKING OF MINERAL WATERS.

"The drinking of mineral waters, particularly as it is practiced by thousands of patients who are sent for curative purposes to the numerous mineral spring resorts in all parts of the world, is an established therapeutic custom. The multitudes of persons who indulge in the water drinking at the spas, as well as the large number of physicians who repeatedly advise the treatment as an established routine, make it seem more than probable that the practice is a well-founded one. Yet we venture to believe," says *The Journal of the American Medical Association*, "that few at best of all those who adopt or prescribe the mineral spring therapy could offer a reasonably tenable explanation of precisely what they hope to accomplish thereby, and how they have succeeded. Thus it happens that the cure or the improvement of the patient is obvious; a reason for the satisfactory outcome is wanting. Consequently in some quarters there has arisen the same sort of nihilism in relation to mineral waters that one finds exhibited in respect to the use of drugs. It is the reaction against a blind empiricism.

"When an interpretation of the alleged beneficial effects of drinking mineral waters has been indulged in the answer is sometimes made that the effects are merely those of water drinking per se. Nothing specific is claimed other than a diuresis which has given rise to that overworked expression, 'flushing out' the system—whatever it may mean. Again, residence at the mineral spas usually involves the simultaneous regulation of diet and the orderly pursuit of a carefully planned routine of living; also it means a change of environment, new scenes and elimination of social and business worries. Rest and exercise, food, drink, baths—physical therapy, dietotherapy, balneotherapy, psychotherapy—are combined to create an internal and external hygienic environment of which the individual factors are not easily dissociated. The mineral water thus becomes a mere incident rather than a dominant force in the therapeutic success.

"There are, of course, mineral waters which have a determined basis for their use. Strongly alkaline waters of the Vichy type have a rational use. Laxative waters find an explanation of their effects in the presence of known purgative salts. Chalybeate waters and those which contain arsenic may serve as useful means of administering well-known therapeutic agents. But for the majority of waters there exists a sort of chaos of explanation from which refuge is taken in the vague uncertainties of radioactivity or some similar indefinite novelty."

MENTAL CASES IN GENERAL HOSPITALS.

The pioneer work of the Albany Hospital during the past eleven years, in its hospital care of acute cases of insanity, has attracted much attention and deserves the study of other hospital managers. The activity of the services there is indicated by the admission and treatment of 341 persons during the year in a ward of about thirty beds, with an average residence of twenty-three days for each patient. Most of these persons came into the hospital ward in a critical condition, with the issues of life and death in the balance, and upwards of 50 per cent. of them were discharged in a recovered and improved condition. It is clear that a new field of usefulness to the public is here opened to the general hospital by which persons in the early stages of mental disorder, or apparently threatened with insanity, may without the formality of a legal commitment and its consequent disadvantages go to a hospital where they can receive prompt care and skilled treatment. In the past, for lack of such facilities close at hand, proper treatment has been delayed, and patients have generally remained at home until their condition had grown most serious.

The psychopathic ward of a general hospital places mental diseases on the same footing as other bodily diseases and secures early care. If the symptoms, often so alarming, are the result of an active poison in the body, like the toxic conditions developed in nephritis, typhoid fever, pneumonia, alcoholism or surgical injuries, the possibility of a hurried and erroneous judgment that the patient is insane is thus avoided and prompt treatment is secured. If, on the other hand, a condition of delirium from active disease, often very terrifying to other patients, develops in the ward of a general hospital, the facility with which the sufferer may be transferred without exposure, to a place where he will receive the nursing and care which considerations of safety and proper treatment require, is of the highest importance. Whatever the outcome, prompt treatment has been secured with a minimum of peril and even of discomfort to the one most interested—the patient himself.

In every large general hospital the relief thus secured in its own wards by the proximity of a psychopathic ward can be readily imagined.

It is equally obvious that nurses may receive equal benefit if in the course of training they have an opportunity to become familiar with the nursing of patients in the different forms of delirium. In fact, most of the mishaps which occur in hospital wards are due to a lack of acquaintance on the part of the nurse with the difficulties and perils of delirious patients.

Is it not the duty of hospital managers in all cities where provision is lacking for the care of acute cases of alcoholism, insanity, or other diseases marked by active delirium, to set apart a ward for their accommodation?—*The Modern Hospital.*

MEDICAL ETHICS.

In a city of eight thousand people, there are five doctors; two of these have offices together, the other three practicing independently; one general hospital is in the city. One of these five doctors practices a specialty and administers all the anesthetics at the hospital. The other four are in general practice, each of them doing his own surgery. When one operates two of the other three assist him, sometimes one corps doing the work, sometimes another. When one doctor leaves the city, he offers his patients their choice among the other doctors to care for them temporarily. The absent doctor knows that when he comes back all his patients will be returned to him, regardless of their wishes in the matter. Further, if, during his absence, one of his regular patients develops a new ailment, no matter whom he calls, the patient will be turned back when the regular attendant gets home. If one doctor is busy when a call comes in, he simply has to say "call someone else," knowing that after the one call his patient will be returned to him.

Every week these doctors meet in their county society, presenting papers, discussing cases and reviewing the current literature.

Every year three of them are at the State meeting, leaving the other two to attend the practice of all; sometimes four of them are away, leaving all the work to one man. Each one knows that

he will have his patients back when he returns home.

The charity work is cared for in rotation. Ask any one of them about any doctor in the town and you will be told, that "He is a good fellow," "Knows his business," "Does good work," etc. Ask them who does the shady work in their town and you will be told that all such work goes to a neighboring city.

This is what we would call medical ethics. Practicing our profession as gentlemen among gentlemen, with malice toward none, and, at the same time, a silent or outspoken intolerance for chicanery and malpractice which will drive it from our midst.

Is this picture overdrawn? Those of us who know medical history in Arizona, will recognize the illustration, for it is a fair description of conditions as they exist in one of our cities. If these

MU-COL.—"Mu-col for Cleansing Mucous Membranes" is a nostrum put out by the Mu-col Company, (Inc.), Buffalo, N. Y. The following claims are made: "Mu-col obtains most gratifying results in catarrhal inflammations of the mucous membranes. Leucorrhea, Tonsilitis, Sore Throat, Cystitis, Internal Hemorrhoids, Nasal Catarrh and Pus Cases respond at once to irrigations with Mu-col solution. Strong solutions of Mu-col have proven of sterling value in treating Hives, Prickly Heat, Ivy Poison, Sunburn, Eczema, Typhoid and Scarlet Fever." Examination in the A. M. A. Chemical Laboratory showed Mu-col to be a mixture of sodium chlorid and borax, equal parts, with the addition of a small amount of aromatic substances.—(*Jour. A. M. A.*, Feb. 7, 1914.)

AN IMPROVED TOURNIQUET FOR SALVARSAN ADMINISTRATION.

The method consists in using an inflatable rubber bag about four inches in width and long enough to encircle the arm (the arm band from a blood-pressure apparatus answers admirably), with a tube attached leading to a hand pump with a screw escape valve. The arm band is placed in position around the arm, well above the site of insertion of needle or cannula, and after the arm has been prepared, the whole may be covered with sterile towels.

When the operator and solutions are ready, the nurse is instructed to inflate the bag with the hand pump. The inflated bag pressing on the arm causes a stasis of the venous circulation without perceptibly obstructing the arterial flow, and any desired degree of distention of the obstructed veins may be produced. When the needle has been inserted (closed method) or the vein has been freed and the cannula inserted (open method), the nurse is instructed to turn the screw escape valve, releasing pressure and permitting reestablishment of the venous flow. The solution may then be permitted to flow in as rapidly as is desirable.

The advantages claimed for the method are:

That the degree of distention is easily controlled. This is not posssible with an ordinary tourniquet, which is often tied too tightly, thus stopping both arterial and venous flow, or tied not tightly enough, causing insufficient distention.

That there is no fumbling with knots. The entire procedure is controlled easily and well away from the site of operation.

That there is no jarring of the arm in releasing the obstruction, and the risk of displacing the needle is thus prevented.

That there is minimum danger of injuring the intima of the obstructed vessels.

This method might also be used to advantage in securing haemostasis in operations on the fingers, the forearm, *et cetera*.—D. F. Hoge, M. D., Fort Smith, Arkansas, in *Surgery, Gynecology and Obstetrics.*

LIFE INSURANCE COMPANIES PAYING THE STANDARD FEE.

TEXAS COMPANIES PAYING $5.00 FLAT FEE.

Amarillo National Life Ins. Co., Amarillo.
American Home Life Ins. Co., Fort Worth.
American National Life Ins. Co., Galveston.
Amicable Life Ins. Co., Waco.
Citizens Co-Operative Life Ins. Co., Fort Worth.
Equitable Life Ins. Co., San Antonio.
Fort Worth Life Ins. Co., Fort Worth.
Gibraltar Life Ins. Co., Paris.
Guarantee Life Ins. Co., Houston.
Great Southern Life Ins. Co., Houston.
National Temperance Life Ins. Co., Dallas.
Prudential Life Ins. Co. of Texas, San Antonio.
Sam Houston Life Ins. Co., Dallas.
San Antonio Life Ins. Co., San Antonio.
San Jacinto Life Ins. Co., Beaumont.
Southern Co-Operative Life Ins. Co., Fort Worth.
Southern Union Life Ins. Co., Waco.
Southland Life Ins. Co., Dallas.
Southwestern Life Ins. Co., Dallas.
Texas Life Ins. Co., Waco.
Two Republics Life Ins. Co., El Paso.
Wichita Southern Life Ins. Co., Wichita Falls.

NON-RESIDENT COMPANIES DOING BUSINESS IN TEXAS, PAYING FLAT FEE OF $5.00.

Aetna Life Ins. Co., Hartford, Conn.
Bankers Life Co., Des Moines, Iowa.
Capitol Life Ins. Co., Denver, Colo.
Cherokee Life Ins. Co., Rome, Ga.
Federal Life Ins. Co., Chicago, Ill.
International Life Ins. Co., St. Louis, Mo.
Jefferson Standard Life Ins. Co., Greensboro, N. C.
Kansas City Life Ins. Co., Kansas City, Mo.
Louisiana State Life Ins. Co., Shreveport, La.
Manhattan Life Ins. Co., New York, N. Y.
Meridian Life Ins. Co., Indianapolis, Ind.
Northwestern National Life Ins. Co., Minneapolis, Minn.
Occidental Life Ins. Co., Albuquerque, N. M.
Oklahoma National Life Ins. Co., Oklahoma City. Okla.
Pacific Mutual Life Ins. Co., Los Angeles, Cal.
Pan American Life Ins. Co., New Orleans, La.
Protective Life Ins. Co., Birmingham, Ala.
Reliance Life Ins. Co., Pittsburg, Pa.
Security Life Ins. Co. of America, Richmond, Va.
Great Republic Life Ins. Co., Los Angeles, Cal.

EPILEPSY.

In a preliminary report, C. A. L. Reed, Cincinnati (*Journal A. M. A.*, March 27, 1915), offers a theory for the causes and treatment of epilepsy. He finds all epileptics to be constipated, and permanent cure of this condition is sometimes followed by cure of the epilepsy. Another fact that was impressed on him was that while all epileptics were constipated, only a relatively few constipated persons have epilepsy. The explanation of these facts calls for another etiologic factor, which would account for the existence of epilepsy under given conditions in one case, and the absence of which would account for the absence of epilepsy in others. Hence the toxic factor which he had long recognized as present in all cases of chronic constipation of mechanical origin acquired new significance. It is apparent that there must be some definite or specific poison to account for the phenomena. His surgical experience in treating chronic constipation by replacement and fixation of the colon developed the fact that a cessation of epileptic attacks followed in certain patients, for periods varying from seven months to more than three years. He also found a patient of whose epilepsy he had taken no account, in whom, after a successful operation for intestinal stasis, grand mal epilepsy changed to petit mal epilepsy. In the light of this case, it seemed to him, considering the gravity of the disease, and the obvious fact that the colon was the seat of the difficulty, that the more logical procedure would be to remove the colon. He therefore performed a colectomy on the next two patients, both of whom had grand mal. In one there

had been only two slight attacks of petit mal in the six months. The other one, after six weeks of apparent improvement, died in status epilepticus, and the only lesion found at necropsy was an acute dilation of the duodenum. From this he deduced two lessons: First, that the ptosic condition of the mesocolon from a loaded bowel or a fat omentum could produce obstructive angulation of the duodenum; and, second, that the specific poison of epilepsy was elaborated in the duodenum. It also taught him that colectomy in one stage was rather too severe for epileptic patients, and that it would be wiser to do it in two stages: First, an ileosigmoidostomy or short circuiting, after a considerable interval, colectomy. Following this theory, in several cases, he had good results for a considerable period after ileosigmoidostomy, but in two of these, convulsions returned later, and colectomy was performed. He deduced from this that feces coming down from the small intestine into the now inactive colon were extraordinarily toxic, and ileosigmoidostomy alone might be more dangerous than epilepsy in ordinary cases. He was also struck with the lack of a hereditary factor in the history of his epileptics, and he was unable to find in his cases any one of traumatic epilepsy from head injury, though there were numerous cases in which an accident was a manifest cause of the splanchnoptosis. On the contrary, every phase of the disease seemed to emphasize the existence of a poison of intestinal origin; the mental symptoms, vertigo, tetaniform convulsions, pupillary dilatation, high blood tension, and low average temperature. In only a single instance did he find a family with more than one epileptic member. Taking all the facts into consideration, it occurred to him that where the restoration of the intestinal function did not relieve the epilepsy, an immunization by vaccines might be of use. He therefore tried an autogenous vaccine from the alvine evacuations in two patients who had undergone ileosigmoidostomy, and were not suitable cases for colectomy; and had gratifying results in both cases and others later thus treated. In view of this experience, Reed has been brought to think that: "1. Epilepsy is caused by a specific infection, probably a bacillus of the gas-forming series. 2. The infection is located in the intestinal canal, probably primarily in the duodenum, always finally in the colon, and may be superficial, intrafollicular, or interstitial, or may, and probably does, involve the blood as a propagating medium. 3. The infection seems to be made effective primarily through constipation or mechanical origin. 4. The relief of the mechanical cause of the constipation with resulting restoration of bowel function results in the cure of epilepsy in cases in which the infection is probably superficial. 5. The principle of immunization holds good in the treatment of cases in which the infection obviously lies deeper, in all of which autogenous vaccination may well be applied as a matter of routine." This preliminary report is published with the hope that it may stimulate investigation by other practitioners. He hopes to lay further details of his work before the profession at some future time.

HOW TO SHARPEN A SCALPEL.

A quantity of clean beef fat is rendered to common tallow, strained through fine cloth or canton flannel, and while in the melted state, carborundum powder No. 1 F is stirred into the melted tallow to make a stiff paste. The mixture is then allowed to cool.

To use the paste, simply spread freely on a smooth strop, lay the strop on a table, and draw the scalpel back and forth at *right angles*, not diagonally. This absolutely solves the problem of a keen-edged knife. In cold weather, if the paste is too stiff, add a drop or two of olive oil to the paste on the strop. If you wish an extremely smooth and keen edge, to finish the sharpening a paste can be used of No. 2 F carborundum powder mixed in tallow. However, the No. 1 gives an edge as sharp as a razor, and a dull instrument can be sharpened in one-fourth the time that a stone will do it, and the result is by far more satisfactory.—By V. Berry, M. D., in *Surgery, Gynecology and Obstetrics.*

THE INTRODUCTION OF VACCINATION INTO THE UNITED STATES.

I recently read in a medical work, in reference to vaccination for smallpox, as follows:

"Vaccination for smallpox was first introduced into this country in 1799, by Prof. Benjamin Waterhouse, first professor of medicine in Harvard University."

As a matter of fact, however, the practice of vaccination was introduced seven years prior to the date as ascribed to Prof. Waterhouse.

As vaccination has become a very important factor in the general welfare of the country, perhaps you would care to publish a short statement of its introduction into this country, as it may prove of value as a record. With your permission, it will be necessary to quote a little from family history, the subject being my paternal grandparent.

"William Yates was born at Sapperton, near Burton-on-Trent, England, November 13th, 1767. He inherited his father's estates and titles, and was a cousin of Sir John Howard, the philanthropist, and Sir Robert Peel. He took up the study and practice of medicine as a pastime, attending the poor and needy free of charge.

"Dr. Yates became distinguished as a philanthropist. He studied with Dr. Jenner, the discoverer of vaccination, and became one of Jenner's most enthusiastic supporters. Becoming deeply interested in the new republic (the United States), and its principles, he abdicated his titles to a younger brother and came to Philadelphia, Pa., in 1792, bringing with him some of Dr. Jenner's virus. He then made public the discovery in Philadelphia, and practised vaccination there and elsewhere for many years. Having made the acquaintance of Judge Cooper of Otsego County, N. Y., Dr. Yates purchased a large tract of land in the same county, where he resided until his death, March 7th, 1857."

It may be worth noting that the method first used by Dr. Yates in vaccinating was to apply it to the hands and between the fingers in imitation of the natural way "cow-pox" was acquired by the milkmaids in England.

If there is record of vaccination prior to the above date I should be glad to be advised.

N. S. Yates.

Honeoye Falls, N. Y., in the *Scientific American.*

GAME, STOCK AND CITIZENS.

The epidemic of foot-and-mouth disease and its effect on the packing industry and the stock yards of Chicago have been commented on widely in the daily press from various points of view. "One of the most illuminating comments," *The Journal of the American Medical Association* believes, "appeared in a recent issue of the Chicago *Journal* under the heading 'Live Stock Versus Quail.' Taking the best available estimates of the amount of live stock contained in the state and figuring on an average value of horses at $140 a head, milk cows at $65, other cows at $50, swine at $15, sheep at $6 and mules at $150 (minimum valuations, as most

will admit), the Chicago *Journal* says the total value of live stock in Illinois would be $435,276,000, for the protection of which the state legislature appropriated for the current year a total of $37,340. By way of comparison, the Chicago *Journal* quotes the appropriation for the protection of fish and game for the same time, which amounts to $151,600. The Chicago *Journal* properly characterizes such a situation as 'intolerable.' It says: 'To spend four times as much money protecting quail, ducks and prairie chickens as we spend in caring for one of the basic industries of the state is sheer communal lunacy.' This is true. The farmers and business men of Illinois should see to it that every cent that is necessary to protect the live stock of the state is provided, no matter what economies may be necessary in other directions. But, if such appropriations are justified for the protection of the lives and health of animals, how much should be appropriated to protect the lives and health of the men, women and children of the state? Certainly more than for fish, game and live stock. Yet the appropriation for the protection of the 5,638,591 men, women and children in the state was for 1914 only $120,000, $30,000 less than was appropriated for the protection of fish and game. Are the lives of its citizens of less value to Illinois than the preservation of its quail and bass?"

"THE SMALLPOX ON THE *OHIO*."

"A summary of conditions during the year in the Navy Medical Department includes, among other important problems," says *The Journal of the American Medical Association*, "the outbreak of smallpox on the *Ohio*, which was particularly noted by the lay press at the time. It will be remembered that there were twenty-nine cases of smallpox with five deaths. No cases occurred on the *Vermont*, although her men, examined and vaccinated just before sailing, were exposed in the same manner as those of the *Ohio*. An investigation showed, however, that no vaccination had been done on the *Ohio* for two years before the outbreak, and vaccination of the crew immediately after gave almost 90 per cent of takes, about what would be expected in an unprotected community. Among 100 recruits received on the *Ohio* shortly before sailing for Europe and vaccinated at that time, not a single case occurred."

RURAL SANITATION.

In 1909 the Commission on Country Life reported that "the farm should be the most healthful place in which to live, and there are numberless farmhouses, especially of the farm-owner class, that possess most excellent modern sanitary conveniences. Still it is a fact that there are also numberless other farmhouses, especially of the tenant class, and even numerous rural schoolhouses, that do not have the rudiments of sanitary arrangement. Health conditions in many parts of the open country, therefore, are in urgent need of betterment."

The problem of rural sanitation calls for consideration from two points of view: that of the possible danger of objectionable surroundings and unhygienic practices to the individual on the farm and his immediate neighbors; and that of the menace which insanitary farm conditions may present indirectly to urban communities. The sanitary relation of the farm to the city involves almost entirely the possibility of the spread of actual infection from country to city through milk, meat, vegetables and other farm products. A few years ago it was not uncommon for farmers to meet with a spirit of resistance any suggestion of hygienic improvements which were planned to diminish the danger of the farm as a starting point for the spread of disease. At times there has actually been aggressive opposition to proposed regulations the object of which was defensible from every unbiased point of view. The milk industry could furnish many instances in recent times of actual refusal on the part of farm communities to supply an essential food to the market under conditions that today are everywhere accepted as rational and necessary.

A few years ago the apparent indifference of the rural community to the needs of the urban population dependent on the farm for a healthful food supply could be excused on the basis of ignorance. Today there is no excuse for apathy toward the teachings of modern sanitation. The campaign of education that is being waged throughout the United States by all manner of forces—municipal, state and national—by agencies connected with the Public Health Service, the Department of Agriculture, the experiment stations, the state universities, boards of health, civic organizations and the public press ought to win its way into every rural home that has any ties whatever with civilized communities.

The better understanding of the farmer's unavoidable responsibility toward his distant fellow citizen has in turn reacted to advantage in respect to his own environment. As a recent writer has expressed it: Fortunately with the general advance in rural standards of living in recent years there has come about a considerable awakening of interest among farmers and representatives of rural communities along these lines, as well as among the public as a whole. Modern methods of communication and travel have to a great extent brought the rural districts into closer relationship with the town and cities. The farmer learns of the improved general health and reduction in the death rate resulting from the decrease of the ravages of contagious disease, which has been brought about through the introduction of such preventive measures as a sanitary water supply, proper methods for the disposal of sewage and garbage, and mosquito and fly extermination, and wishes to avail himself of these benefits.

The country medical practitioner well realizes the futile idealism of much that emanates from an urban desk. Sometimes the most elementary sanitary conditions offer puzzling problems when the expense and feasibility of the proposed remedies are carefully studied. Too often the city reformer forgets the enforced monotony of diet, the lack of recreation and the excessive hours of work which farm conditions may entail in some sections and at certain seasons. There are social as well as economic forces involved in farm life, says *The Journal of the American Medical Association*. The reform of rural sanitation, which is undeniably called for in some parts of the United States, must not overlook the personal elements so strong in the country dweller. With the exigencies of the situation kept in mind the campaign for improvement in rural sanitation is likely, in the words of a recent writer, to do much to make farm life at once more profitable, more healthful and more attractive, and by so doing contribute to safeguard the food supply, and therefore the health and the efficiency of the nation.

CESAREAN SECTION.

After noticing the rapid extension of the scope of cesarean section in the last few years, and the changes in its technic, George Gellhorn, St. Louis, (*Journal A. M. A.*, January 16, 1915), remarks that as the number of such operations increased, certain undesirable after effects became apparent. The unsightly abdominal scar with its tendency toward her-

nia was perhaps the least of these. Much more serious, he says, was the frequent, almost constant, occurrence of postoperative adhesions, the unintentional ventrofixation of the uterus, with its annoying symptoms, the possibility of subsequent miscarriages, or the danger in future deliveries from the pathologic immobilization of the uterus. On these accounts, a number of modifications came into use, among which is the "high incision" of Davis, recently popular because of the claim that adhesions could be prevented with it. The classical cesarean section and all its modifications have this essential in common, that is, lack of infection. The membranes had to be intact or be recently ruptured, and previous examinations and attempts at delivery had to be strictly avoided. There remain a large number of so-called "unclean" cases, in which infection already existed or the precautions mentioned have not been observed, or else suspected cases of infection in which there was some doubt as to this matter. For such cases, Frank's new method, called the "extra-peritoneal," essentially the same as an operation originated by Thomas of New York in 1870, but since forgotten, was designed. Its principle was to make an incision into the lower uterine segment instead of the fundus, and to exclude the operative field from the rest of the peritoneal cavity. It has not fully fulfilled the hopes it excited, and patients already infected could not be saved by it. Brilliant results, however, were obtained in suspected cases, and even more so when employed in aseptic ones. Gellhorn gives the details of three cases, and describes the technic used. It is, strictly speaking a transperitoneal method. The parietal peritoneum is first incised, then the visceral peritoneum is pushed off the lower uterine segment, and finally, by stretching the parietal peritoneum to the uterus, the free abdominal cavity is excluded, and the operation rendered extraperitoneal. In the classical cesarean section we have, beside the scar and adhesion, copious bleeding during the operation, escape of amniotic fluid and meconium into the peritoneal cavity during the section, and the possible leakage of womb fluid later on. The profuse bleeding and escape of amniotic fluid is also a drawback to the high incision method and actual experiment does not support fully the claim of the avoidance of adhesions. For these reasons, the extraperitoneal method with the special technic mentioned is preferable. Postoperative adhesions are not conceivable and the temporary protection of the abdominal cavity by suturing the parietal peritoneum to the uterus prevents the escape of fluids. After the operation, the parietal peritoneum completely covers the field, and the contractions of the uterus cause the peritoneal sutures to disappear, leaving an unbroken peritoneal surface. The afebrile course of the patient corroborates this statement, and the entire absence of bleeding in the lower uterine segment is striking. The possibility of future rupture of the scar is mentioned, but practical experience has not borne out the anticipations of danger from this cause. The scar is practically identical with that of vaginal cesarean section, which we know does not dispose to rupture. There is only one condition in which the extraperitoneal method does not offer advantages over the others, and that is in placenta praevia. In such a case the incision through the lower uterine segment would open the enormous dilating blood sinuses, which would render orientation difficult from the blood inundation, and proper check of the hemorrhage might be difficult.

THE BOOKKEEPING OF HUMANITY.

"In the study of disease, whether for the development of measures of prevention or for cure," says *The Journal of the American Medical Association*, "uniform and accurate vital and morbidity statistics are so essential that no apology need be made for repeatedly referring to the subject. It is to be deplored, however, that even after many years of agitation, only about 60 per cent of our population is included within the approved area of registration of births and deaths. Satisfactory figures regarding morbidity are recorded in a very much smaller area. The American Medical Association has continually and consistently fought for such measures. In 1846, by resolution, the Association requested the profession to take immediate concerted action to secure legislation to establish offices for the collection of vital statistics, and provided for a committee from each state to report on a uniform system of registration of marriages, births and deaths. In 1855 a resolution was adopted providing for a committee in each state and territory to study and 'report on its medical topography, epidemic diseases, and the most successful treatment thereof.' Some action looking to these ends has been taken at various sessions since that time, and has culminated in the model bill for the registration of births and deaths, drafted and indorsed by the Association in co-operation with other national bureaus and bodies.

"Trask, in a recent article, gives a brief historical account of the efforts in this and other countries to secure adequate registration laws, the methods of computation of vital and morbidity statistics, the results and conclusions to be obtained from them and the practical benefits to be derived from their study concerning the distribution of diseases, their prevalence, epidemiology and the means for their eradication. At present, twenty-four states have satisfactory registration of births and deaths. As shown by Trask, only one disease—small pox—is reportable in all the states; such a highly infectious disease as scarlet fever in 45; diphtheria in 46; measles in 31; tuberculosis in all forms in 29; typhoid fever in 35; whooping-cough in 27, and cerebrospinal meningitis in 29, while many other dangerous diseases are reportable in a smaller number of states, dwindling down in many instances to one or two. Ophthalmia neonatorum, a disease responsible for much blindness and disability, is reportable in only fourteen states, and the occupational diseases, which are coming to be recognized as the source of a large proportion of the burden of expense of public hospitals and other public and charitable institutions, are so far reportable in only fourteen states, and this number only for one of the most easily recognized and prevalent occupational diseases—lead poisoning.

"The collection of information concerning the communicable diseases, the bookkeeping of humanity, is as important, if not more so, than any type of census which a nation may make, and adequate, uniform vital statistics laws are the first step in securing them."

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1915, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies:"

STANDARD RADIUM SOLUTION FOR BATHING.—A 5.2 per cent. barium chloride solution containing radium chloride equivalent to 4.2 micrograms of radium per bottle. For "Actions and Uses" see the article on radium in New and Nonofficial Remedies. The barium in the solution is said to have no effect. The contents of a bottle, containing 4.2 microcuries or 10,000 Mache units are used for a bath. The

Radium Chemical Co., Pittsburgh, Pa. (*Jour. A. M. A.*, April 17, 1915.)

STANDARD RADIUM SOLUTION FOR DRINKING.—A solution of 2 micrograms of radium and 1.3 mg. barium chloride per bottle of 60 c. c. For "Actions and Uses" see the article on radium in New and Nonofficial Remedies. In view of the small barium content, it is claimed that the physiologic action of barium may be ignored. The Radium Chemical Co., Pittsburgh, Pa. (*Jour. A. M. A.*, April 17, 1915.)

STANDARD RADIUM EARTH.—A mixture consisting chiefly of silica and small quantities of carnotite, 450 Gm. containing 0.45 micrograms of radium in the form of radium sulphate. For "Actions and Uses" see the article on radium in New and Nonofficial Remedies. For use the earth is mixed with water and heated for a time. The Radium Chemical Co., Pittsburgh, Pa. (*Jour. A. M. A.*, April 17, 1915.)

STANDARD RADIUM COMPRESS.—A compress containing 225 Gm. of a mixture consisting chiefly of silica and barium sulphate containing radium sulphate equivalent to 15 micrograms of radium. For "Actions and Uses" see the article in New and Nonofficial Remedies on radium. Being applied wet, it is claimed that the action is partly due to beta and gamma radiation of the radium salt and partly to the radium emanation which is dissolved out by the water. The Radium Chemical Co., Pittsburgh, Pa. (*Jour. A. M. A.*, April 17, 1915.)

PAPAVERINE.—An alkaloid obtained from opium but not chemically related to morphine. Its use has been proposed in various atonic conditions of the smooth muscles, particularly in gastric and intestinal spasms, for the diagnosis of pyloric spasm, biliary colic and in bronchial spasm. It is a feeble analgesic and local anesthetic. Neither tolerance nor habituation from its use has been reported. It is used in the form of its salts (see below.)

PAPAVERINE HYDROCHLORIDE.—This contains not less than 88 per cent. of papaverine. Papaverine hydrochloride is odorless, bitter and permanent in the air. It is sparingly soluble in water; soluble in alcohol; very soluble in chloroform; insoluble in ether. It is marketed as:

PAPAVERINE HYDROCHLORIDE, MERCK.—Merck and Co., New York.

PAPAVERINE HYDROCHLORIDE, ROCHE.—Hoffmann-LaRoche Chemical Works, New York.

PAPAVERINE HYDROCHLORIDE, ROCHE, TABLETS.—Each tablet contains papaverine hydrochloride 0.04 Gm. Hoffmann-LaRoche Chemical Works, New York. (*Jour. A. M. A.*, May 29, 1915.)

PAPAVERINE SULPHATE.—This contains not less than 85 per cent, of papaverine. Papaverine sulphate is odorless, bitter and slightly hygroscopic. It is soluble in water and in alcohol; very soluble in chloroform; insoluble in ether. It is marketed as:

PAPAVERINE SULPHATE, ROCHE, AMPULES.—Each ampule contains 0.04 Gm. papaverine sulphate. Hoffmann-LaRoche Chemical Works, New York. (*Jour. A. M. A.*, May 29, 1915.)

PROPAGANDA FOR REFORM.

STRYCHNIN AND CAFFEIN AS CARDIOVASCULAR STIMULANTS.—F. H. Newburgh has studied the effects of strychinin and caffein in acute infectious diseases. He finds that strychnin sulphate in medicinal doses does not increase the output from the heart, slow the pulse or materially raise the blood pressure. He concludes that there is no logical basis for its use as a cardiovascular stimulant. Further, he finds that caffein sodio-salicylate, in ordinary dosage, does not raise the blood pressure or slow the pulse. His experiments did not determine if caffein increased the blood flow. (*Arch. Int. Med.*, March, 15, 1915.)

WATERBURY'S COMPOUND.—Four years ago the Council on Pharmacy and Chemistry reported unfavorably on "Waterbury's Cod Liver Oil Compound." Having been requested to consider again the product, now known as "Waterbury's Compound," the Council found that there was no evidence that it is a substitute for cod liver oil. It held that Waterbury's Compound is advertised with misleading claims and therefore voted that no further consideration be given to it. (*Jour. A. M. A.*, March 20, 1915.)

NEURILLA.—To show how a practically worthless mixture may be exploited by means of ill-considered testimonials, the Council on Pharmacy and Chemistry publishes a report on Neurilla, apparently the sole output of the Dad Chemical Company. Neurilla, according to the manufacturer's claims, depends for whatever virtues it has on two generally discarded drugs, skullcap and passion flower, present in unstated amounts, "aromatics" and 20.3 per cent alcohol. It is advertised as a "nerve tonic" and is said to be "A Valuable Aid in the Treatment of Fevers, Colds, La Grippe, etc." Inquiries sent to some of the physicians whose testimonials were used to promote Neurilla brought replies indicating these testimonials to have been given thoughtlessly and on insufficient experience. In most cases the writers stated that they had abandoned the use of Neurilla long ago. (*Jour. A. M. A.*, March 27, 1915.)

GUERTIN'S NERVE SYRUP.—This in an epilepsy treatment sold by the Kalmus Chemical Co., Cincinatti, Ohio. Examination in the A. M. A. Chemical Laboratory demonstrated Guertin's Nerve Syrup to be essentially a mixture of several bromides, the bromide content being equivalent to 13.9 grains postassium bromide per fluidram. The recommended daily dose of 4 to 8 teaspoonfuls is equivalent to 55.6 to 111.2 grains potassium bromide. While possessing all the potency for harm that resides in secret mixtures of the bromides, the purchaser of this nostrum is led to believe that it is harmless. (*Jour. A. M. A.*, March 27, 1915.)

VIROL.—The Council on Pharmacy and Chemistry voted to refuse recognition to Virol (sold by the Etna Chemical Co. in the United States) because the claims made for it were unsubstantiated and unwarranted. A referee who analyzed Virol concluded that it was an extract of malt, with fat and a small amount of protein. He held that Virol could not be considered a "complete food" as claimed, nor an ideal food for infants. (*Jour. A. M. A.*, Feb. 20, 1915.)

PURITY OF ETHER and POSTANESTHETIC GLYCOSURIA.—Animal experiments by Ross and Hawk show that postanesthetic glycosuria is not due to impurities as has been claimed, but is brought about by a carbohydrate free diet prior to the anesthesia. Those who claim that the U. S. P. tests for the purity of ether are insufficient, should present better evidence than they have so far done. (*Jour. A. M. A.*, Feb. 20, 1915.)

TOWNS' EPILEPSY TREATMENT.—This is a bromid mixture marketed by the Towns Remedy Company, Milwaukee, Wis. It was found by the A. M. A. Chemical Laboratory to contain the equivalent of 21.3 grs. of potassium bromid and 0.78 gr. of potassium iodid per dose (one and one-half teaspoonful). (*Jour. A. M. A.*, Feb. 20, 1915.)

ANALUTOS.—Analutos is a name applied to calcium acetyl-salicylate. The Council on Pharmacy and Chemistry refused recognition to Analutos because it was held not to have any advantages over acetyl-salicylic acid. In view of this, it was held that medicine should not be burdened with this non-descriptive name. (*Jour. A. M. A.*, Feb. 20, 1915.)

Budwell's Emulsion.—Budwell's Emulsion No. 1 is stated to contain cod liver oil, "Iodide of Arsenic," "Iodide of Calcium" and "Iodide of Manganese." Budwell's Emulsion No. 2 is claimed to contain the ingredients of the first and also creosote carbonate and guaiacol. The Council on Pharmacy and Chemistry refused recognition to these preparations because the exploitation made likely their use as "consumption cures" and because they are irrational shotgun mixtures. (*Jour. A. M. A.*, Feb. 20, 1915.)

Soothing Wine for Children, Containing Morphine, Condemned by U. S. Court.—Five packages of Moreau's Wine of Anise—labeled in part "Moreau's Wine of Anise Children's Soothing Wine, each ounce containing one-third grain acetate morphine, 8 p. c. alcohol"—was seized at Boston, Mass., on recommendation of the Secretary of Agriculture, March 16, 1914. Misbranding was alleged on two major grounds: First, that the statements on the label regarding the curative and therapeutic effect of the drug and its ingredients were false and fraudulent, and, second, that the following words on the label, "Moreau's Wine of Anise being compounded with a pure, mild wine, is preferable to any soothing remedy compounded with syrup," would lead the purchaser to believe that the product was a wine, whereas it was not a wine.

The charge that false and fraudulent statements as to the curative effect of the product had been made arose from the fact that the drug and the packages and labels with it contained a statement that the drug was a mild, sweet medicated wine, an excellent remedy for children in cases of diarrhoea, dysentery, indigestion, and vomiting, which would lead the purchaser to believe that the drug was a remedy for said ailments, whereas the drug was not a remedy for said ailments.

Tuberculosis "Remedies" That Are Worthless.—After investigating under the Food and Drugs Act a large number of preparations advertised as consumption cures, the Department of Agriculture has not been able to discover any that can in any sense be regarded as "cures" for tuberculosis. Some contain drugs that may at times afford some temporary relief from the distressing symptoms of the disease, but this is all. Since the passage of federal legislation prohibiting the shipment in interstate commerce of medicinal preparations for which false and fraudulent claims are made, there has been a marked tendency to label these preparations "remedies" instead of "cures" or "infallible cures" as they used to be called. In many cases, however, they cannot even be regarded as remedies. A "cherry balsam," for example, for the "cure" of "consumption" and "hemorrhage of the lungs," which it was represented would "strike at the very root of the disease," was found on analysis to be nothing but a solution in water and alcohol of opium, sugar, benzaldehyde, inorganic salts and coloring matter. It contained no cherry bark extract or balsam.

A more elaborate "cure" consisted of five different preparations, which the credulous patient was to take separately. These were, first, the medicine proper, the essential ingredients of which were found to be morphine, cinnamic acid and arsenic—not a very safe mixture to take habitually; second, a tonic which was supposed to contain iron but did not; third, a "cough mixture" made up of alcohol, chloroform, and codeine, which is a derivative of opium or morphine; fourth, a mixture which contained some quinine, and a solution of water and alcohol; and, fifth, codeine tablets. Even the strongest constitution could hardly stand a prolonged course of such a treatment.

Peacock's Bromides.—A report of the Council on Pharmacy and Chemistry points out that Peacock's Bromides (The Peacock Chemical Co.,) said to contain the bromides of potassium, sodium, ammonium, calcium and lithium equivalent to 15 grains of potassium bromide per fluidram, is secret in composition in that the amount of the individual bromides is not stated. The report contradicts the asserted uniformity of the preparation and the claim of superiority. It questions the asserted advantage of a mixture of bromides over a simple bromide solution and holds that, if there were any advantages in prescribing such a mixture of bromides, the physician should regulate their proportions. The report further points out that the therapeutic claims are misleading and not in accordance with modern teachings and practice. Thus while the Peacock Company advises the liberal use of bromides in the treatment of epilepsy, the best clinical teaching advises the avoidance of bromides as far as possible. (*Jour. A. M. A.*, April 3, 1915.)

Chionia.—A report of the Council on Pharmacy and Chemistry discusses the claims made for Chionia (The Peacock Chemical Co.) said to be "A Preparation of Chionanthus Virginica"—a drug which is generally conceded to be worthless and which has been the subject of an unfavorable report of the Council. While claiming Chionia to be a "potent hepatic stimulant" the exploiters appear to appreciate its inefficiency, for it is advised to combine the nostrum with drugs of recognized potency such as the heart tonics and laxatives in passive congestion of the liver, mercurial purge, podophyllin or sodium phosphate in "biliousness," etc. (*Jour. A. M. A.*, April 3, 1915.)

Dr. May's Formula.—Dr. May's Formula, formerly called May's Epilepticide, is sold on the mail order plan by Dr. W. H. May Medical Laboratory, New York. Examination in the A. M. A. Chemical Laboratory indicated that this "epilepsy cure" contains amonium bromide and sodium bromide as the essential constitutents, the bromide content being equivalent to 15 grains of potassium bromide per fluidram. (*Jour. A. M. A.*, April 3, 1915.)

Hagee's Cordial.—The Council on Pharmacy and Chemistry reports that Hagee's Cordial of the Extract of Cod Liver Oil Compound (Katharmon Chemical Co.) has neither the nutritive qualities nor the reconstructive efficacy of cod liver oil and that it is worthless for the conditions for which it is advertised. Recent experiments having shown that cod liver oil, like butter and egg yolk, possesses certain growth-promoting properties not found in some other fats, the promoters of Hagee's Cordial claim these properties of cod liver oil for their extract. The Council has previously expressed the opinion that cod liver oil owes its value in the main or entirely to its fatty constituents. Now the Connecticut Agricultural Experiment Station has demonstrated that the growth-promoting properties of cod liver oil are not to be found in Hagee's Cordial. (*Jour. A. M. A.*, April 10, 1915.)

Wampole's Preparation.—Wampole's Perfected and Tasteless Preparation of an Extract of Cod Liver (H. K. Wampole Co., Inc.) is marketed under a non-quantitative and therefore practically worthless statement of composition. Experiments carried out at the Connecticut Agricultural Experiment Station have demonstrated that the Wampole Preparation, which also contains extract of malt and sugar, does not possess the advantages over ordinary cod liver oil as a source of nutriment, as claimed. Neither did the Wampole preparation appear to possess to any marked degree the reconstructive properties of cod liver oil, butter fat and egg yolk. The Council on Pharmacy and Chemistry held Wampole's Per-

fected and Tasteless Preparation of an Extract of Cod Liver ineligible for New and Nonofficial Remedies because, contrary to claim, it lacks both the nutritive and reconstructive properties of cod liver oil and because it is marketed under an indefinite name and under unwarranted claims. (*Jour. A. M. A.*, April 10, 1915.)

THE ELECTRO-CHEMICAL RING.—A postoffice fraud order has put a stop to the sale of this silly contrivance. This ring, put on the market by the Electro-Chemical Ring Co., Toledo, Ohio, was found to be made of ordinary iron. It was claimed to cure diseases caused by acid in the blood, among which were stated to be Bright's disease, diabetes, epilepsy and cataract. (*Jour. A. M. A.*, April 10, 1915.)

DR. CRONEY'S SPECIFIC FOR EPILEPSY.—This epilepsy "cure" is sold on the mail order plan by Dr. James T. Croney of Columbus, Ohio. Examination in the A. M. A. Chemical Laboratory showed it to be a solution containing ammonium bromide and potassium bromide as essential constituents, containing bromide equivalent to 16.9 grains potassium bromide per dose of two teaspoonsful (2 fluidrams.) Like other epilepsy "cures," Croney's Specific for Epilepsy is a bromide mixture and is both worthless and dangerous. (*Jour. A. M. A.*, April 17, 1915.)

THE QUALITY OF BLAUD'S PILLS.—An examination of the various brands of Blaud's Pills supplied by manufacturing houses, made in the A. M. A. Chemical Laboratory, refutes the commonly assumed instability of ready made Blaud's pills. On the other hand it is shown that the Blaud's pills on the market are not very reliable as to the amount of iron present, the variation ranging from 77 to 183.2 per cent. of the claimed amount of ferrous carbonate. The different brands also differed widely in their ease of disintegration. The special forms, such as the "nascent" preparation, the "soft mass" pills and the gelatin encapsulated oily suspension, sold as "Frosst's Blaud Capsules," showed no advantage over the ordinary kind. (*Jour. A. M. A.*, April 17, 1915.)

LACTOBACILLINE OMITTED FROM N. N. R.—The Franco-American Ferment Co. is offering its Lactobacilline preparations direct to the public. The company has distributed circulars in which the public is informed that auto-intoxication is the cause of innumerable ills, that the Bulgarian bacillus is a "wonderful corrective or remedy" for such conditions and that the Lactobacilline products and—by inference—the only reliable products. In view of the action of the Franco-American Ferment Co. and the tendency to cause the public to exaggerate slight ailments into alarming conditions, the Council on Pharmacy and Chemistry has deleted the Lactobacilline products from New and Nonofficial Remedies. (*Jour. A. M. A.*, April 17, 1915.)

OLIVINE.—Olivine was a liquid soap put on the market by the To-Kalon Manufacturing Co., Syracuse, N. Y. It was declared misbranded under the Federal Food and Drugs Act because, contrary to claim, it was not made from olive oil, because boroglycerine was absent and because it had neither antiseptic or germicidal action. (*Jour. A. M. A.*, April 17, 1915.)

FRECKELESS.—Freckeless, J. E. Barry, Paris, Texas, sold for the removal of freckles, sunburn, tan, etc. It was found to be a petrolatum ointment of bismuth subnitrate and ammoniated mercury. Freckeless was declared misbranded under the Food and Drugs Act, because it was not harmless as claimed and because it was not a skin food, as claimed. (*Jour. A. M. A.*, April 17, 1915.)

VERACOLATE.—The Council on Pharmacy and Chemistry reports that "Veracolate (plain)" (The Marcy Co., Boston, Mass.,) is semisecret in composition, unscientific in combination and exploited under unwarranted claims. It reports that the same criticisms apply to "Veracolate with Pepsin and Pancreatin" and "Veracolate with Iron, Quinine and Strychnin." For "Veracolate (plain)" the following non-quantitative formula is given. "A compound containing the bile acids, sodium glycocholate, sodium taurocholate with cascara sagrada and phenolphthalein." "Vercolate with Pepsin and Pancreatin" is said to contain, in addition to the indefinite "Veracolate," the two mutually incompatible ferments, pepsin and pancreatin, and oil of peppermint. The complexity of "Veracolate with Iron, Quinine and Strychnine" has increased so that this unscientific mixture is claimed to contain seven constituents. These products are discreditable to the medical and pharmaceutical profession alike and their use is against the public good. (*Jour. A. M. A.*, April 24, 1915.)

TAUROCOL.—The Paul Plessner Co., Detroit, Mich., markets Taurocol and Taurocol Compound Tablets. The company makes a pretense of giving the formula—minus any quantities—thus: "Taurocol is a combination of bile salts, extract of cascara sagrada, phenolphthalein and aromatics." Taurocol Compound Tablets are said to contain, in each, "Taurocol (Bile Salts)" gm. .1296, "Pepsin 1-3000" gm. .0324, "Pancreatic Ext." gm. .0324, "Extract Nux Vomica" gm. .0081 and "Aromatics" q. s. The Council on Pharmacy and Chemistry points out that the composition and the therapeutic properties claimed for these preparations are essentially the same as those claimed for Veracolate and Veracolate with Pepsin and Pancreatin. It reports that the objections made to these also apply to Taurocol and Taurocol Compound Tablets. (*Jour. A. M. A.*, April 24, 1915.)

THE CONVERSE TREATMENT.—This is a Columbus, Ohio, epliepsy "cure." An examination in the A. M. A. Chemical Laboratory showed that each 100 c. c. contained 7.3 gm. ammonium bromide, 5 gm. calcium bromide and 8.7 gm. potassium bromide, the bromide content being equivalent to 14.5 gm. potassium bromide per fluidram (one teaspoonful.) Despite this bromide content the exploiters have in the past stated the epilepsy cures containing bromides "tend to aggravate the trouble in the long run." (*Jour. A. M. A.*, April 24, 1915.)

SECRETOGEN.—To call attention to the unfounded and extravagant claims made for internal secretion products, the Council on Pharmacy and Chemistry reports on Secretogen Elixir and Secretogen Tablets, sold by the G. W. Carnrick Co. The report discusses the insufficiency of the evidence for the administration of secretin—claimed to be present in these preparations. The Council holds that a rational basis for the therapeutic value of Secretogen is lacking because there is no evidence that the absence of secretin is a cause of gastro-intestinal diseases, and because there is no evidence that secretin in any form is physiologically active when administered by the mouth. (*Jour. A. M. A.*, May 1, 1915.)

THE OXYPATHOR.—An order forbidding the use of the United States mails has been issued against the Oxypathor Company, Buffalo, N. Y. and its branches at Columbus, Ohio and Wilmington, Del. The Oxypathor consists essentially of a piece of nickel-plated tubing filled with inert material, sealed and having attached to each end a flexible cord with a garter-like attachment at the free ends. This outfit was sold with the absurd claim that it caused the absorption of large quantities of the oxygen through the skin of the user. (*Jour. A. M. A.*, May 8, 1915.)

BURNHAM'S SOLUBLE IODINE.—The Council on Pharmacy and Chemistry reports that Burnham's Soluble Iodine is a semi-secret preparation exploited by extravagant and dangerous therapeutic claims

and therefore ineligible for New and Nonofficial Remedies. The A. M. A. Chemical Laboratory has shown that the official tincture of iodine, diluted one-half, would be essentially equivalent to the Burnham preparation. While the promoters claim that the administration of free iodine is therapeutically superior to the administration of iodides, this is a fallacy. The small dose of Burnham's Soluble Iodine recommended by the manufacturer accounts for the claimed freedom from symptoms of iodism. The Council considers as particularly reprehensible the recommendation to inject the preparation intravenously and the proposed indiscriminate use in tuberculosis. (*Jour. A. M. A.*, May 15, 1915.)

Venarsen.—The Council on Pharmacy and Chemistry reports that while formerly Venarsen was marketed with indefinite statements as to its identity and in a way to suggest analogy with salvarsan, it is now admitted to be essentially a sodium cacodylate solution, each ampule containing about 9 grains sodium cacodylate, 1/40 grain mercuric iodid and 3/4 grain sodium iodid. The Council finds the therapeutic claims made for Venarsen to be exaggerated and unwarranted and holds the administration of sodium cacodylate and mercuric iodid in fixed proportions intravenously to be an irrational procedure. (*Jour. A. M. A.*, May 22, 1915.)

Nomenclature of Drugs.—The first requisite of successful prescribing is to know what one is giving. Non-descriptive or therapeutically suggestive names for drugs lead to uncritical prescribing, as has been shown by the random use of heroin and the untoward results from Atoxyl. Often proprietary names make it possible to charge an exorbitant price for a well-known drug, as when hexamethylenamin is sold as Uritone, Urotropine or Cystogen and theobromin sodium salicylate as Diuretin. Since the action of drugs depends on their chemical nature, the name should at least suggest the chemical composition of the drug or its source and relationship. The lack of scientific nomenclature of drugs is discreditable and hampering to modern medicine. Physicians should eschew the fanciful or therapeutically suggestive names provided by manufacturers and give preference whenever possible to non-proprietary descriptive names for drugs. (*Jour. A. M. A.*, May 29, 1915.)

NEWS

The Frank S. Betz Company Expands.—The Frank S. Betz Company of Hammond, Ind., well known to the medical profession throughout the country as a distributor of moderate priced instruments and supplies for the medical profession, has expanded to the extent that a coterie of business men, including many high in the financial and business world, have purchased a large interest in the concern. It is said that extensive plans are being formulated for a general extension of the business in all of its present branches, and for the addition of still other departments.

Association of Boards of Health of Texas Organized.—Having for its purpose advancement of sanitary science, promotion of better co-operation and organization of boards of health and the uniform enforcement of sanitary laws and regulations, the Association of Boards of Health of Texas was permanently organized June 28th at Austin. Officers were elected as follows:

Drs. W. M. Brumby, Waco, president; W. E. Spivey, Belton; Charles Carver, Eagle Pass; W. W. Latham, Crockett; T. C. Wray, Dayton; R. L. Graham, Cotulla, vice-presidents; W. Loomis, Dallas, secretary; J. C. Wynn, Gilmer, treasurer.

The association will meet annually and discuss scientific papers bearing on public health and preventive medicine.—*Waco News.*

Texas May Get a Pellagra Station.—The state health department was visited in July by Dr. Joseph Goldberger of the United States public health service, who is devoting his entire time under that service to the study of pellagra. The investigation of pellagra was started in 1907 and last year Dr. Goldberger was made chief of this department and since then several stations for treating the disease have been established in Georgia and the Carolinas and at Jackson, Miss., which are conducted under the supervision of Dr. Goldberger.

According to Dr. W. A. Davis, secretary of the state board of health, efforts will be made to have a pellagra station established in Texas. The board will attempt to gather statistics from the state so as to interest the public health service to such an extent that an expert may be detailed for the purpose of making a special study of the disease in this state.—*Waco News.*

Hookworm Commission Work in Texas Stopped.—The hookworm campaign which has been carried on in Texas for the past three years through the Rockefeller foundation and sanitary commission was ended on June 30, because of the failure of the state of Texas to make any appropriation of funds for the perpetuation of the work. This announcement was made by Dr. John A. Ferrel, assistant director general of the Rockefeller foundation and international health commission, who had a conference with State Health Officer W. B. Collins. Dr. Ferrel came to see what efforts the state of Texas had made to continue the work and learned that none had been made.

"The commission does not feel justified in continuing this work in Texas," said Dr. Ferrel, "unless the state shows a disposition to co-operate with us."

It also developed that the only co-operation the Rockefeller commission received was the local county appropriations made by different counties in the state.—*Beaumont Enterprise.*

Dallas Postgraduate Medical School Organized.—With the election of Dr. John S. Turner as president, and the selection of a full list of additional officers, organization of the Dallas Polyclinic Medical School was accomplished July 10th. The full list of officers is:

President, Dr. John S. Turner; vice-president, Dr. Martin E. Taber; secretary, Dr. S. E. Milliken; Treasurer, Dr. J. H. Smart; executive committeeman, Dr. W. C. Swain; Publicity—chairman, Dr. M. P. Stone; Dr. A. Wilkinson, Dr. A. H. Fortner.

It is expected that the school will formally open about October 1.

Dr. Turner, the president of the school, is the committeeman from the Texas State Medical Association to the American Medical Association, on medical education, and the post-graduate method as will be adopted here, is indorsed by the National association. Successful schools, similar to that to be established here, are in existence at New York, Philadelphia and Chicago.

It is declared that the new school will not in any way interfere with the undergraduate school now in Dallas—in fact, members of the faculty of the new school will be taken from Baylor College and from the group of men now known as "non-school men."

Clinical teaching of medicine and surgery, and eye, ear and throat specialties will be had at Parkland hospital, at St. Paul's and at the Baptist Sanitarium. The teaching, it is declared, will be made comprehensive in scope, with the belief that phys-

icians will be attracted here from several hundred miles around.—*Dallas Times-Herald.*

American Proctologic Society.—The American Proctologic Society held its 17th annual session in San Francisco, June 21-22. The following officers were elected to serve during the ensuing year: President, Dr. T. Chittenden Hill, Boston; vice-president, Dr. Frank C. Yoemans, New York City; secretary-treasurer, Dr. Alfred J. Zobel, San Francisco. The following were elected members of the Executive Council: Drs. T. Chittenden Hill, Louis J. Krouse, Geo. B. Evans of Dayton, Ohio, and Alfred J. Zobel. The 1916 meeting will be held in Detroit. Exact date and headquarters will be announced later. The following were elected Associate Fellows: Drs. P. Milton Linthicum, Baltimore; Wm. H. Stauffer, St. Louis, and Wells Teachnor, Columbus, Ohio. The following program was rendered: President's Address, *Retrospect and Prospect*, Dr. Louis J. Krouse, Cincinnati; *A Report of Proctologic Literature From March*, 1914 *to March*, 1915. Dr. Samuel T. Earle, Baltimore; *Rectal Prolapse and Its Mechanics*, Dr. Wm. M. Beach, Pittsburgh, Pa.; *Cause of Dissatisfaction With Hemorrhoidal Operations*, Dr. Rollin H. Barnes, St. Louis; *Report of Case of Carcinoma of the Sigmoids With Stereo-Radiograms*, Dr. Walker I. LeFevre, Cleveland, Ohio; *Emetin Hydrochloride in the Treatment of Amebic Dysentery*, Dr. Geo. B. Evans, Dayton, Ohio; *The Present Status of Local Anesthesia in Surgery of the Lower Bowel*, Dr. Louis J. Hirschman, Detroit; *Which is the Best Anesthesia to be Used in Anal and Rectal Surgery*, Dr. Wm. H. Kiser, Los Angeles; *Further Observation on the Treatment of Pruritus Ani by Autogenous Vaccines*, Dr. Dwight H. Murray, Syracuse; *Peritoneal Adhesions and Intestinal Stasis*, Dr. Jas. A. MacMillan, Detroit; *Constipation, With Special Reference to its Treatment*, Dr. Lewis H. Adler, Jr., Philadelphia; *The Ultimate Nervous Results of Acute Angulation of the Sigmoid, and the Consequent Fecal Stasis*, Dr. Wm. H. Axtell, Bellingham, Wash.; *Notes on Rectal Fistula*, Dr. J. Rawson Pennington, Chicago; *Fecal Abscess in Pouch of Douglas, Following Typhoid: Report of Case*, Dr. Alfred J. Zobel, San Francisco; *Ischiorectal Abscess in Nine Day Old Infant: Report of Case*, Dr. Alfred J. Zobel.

SOCIETY NEWS.

EL PASO DISTRICT—No. 1.

Dr. F. P. Miller, El Paso, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, El Paso, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

El Paso—Dr. C. F. Braden, El Paso; 1st and 3rd Mondays, September to May inclusive.

Reeves-Ward-Pecos—Dr. O. J. Bryan, Pecos.

BIG SPRINGS DISTRICT—No. 2.

Dr. N. J. Phenix, Colorado, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Ector-Midland-Martin-Howard—Dr. W. F. Johnston, Big Springs; 2nd Thursday quarterly.

Fisher-Stonewall—Dr. R. I. Grimes, Sylvester; 1st Tuesday in January and March.

Haskel—Dr. M. W. Rogers, Rule; 2nd Wednesday quarterly.

Jones—Dr. A. McK. Jones, Anson; 2nd Tuesday monthly.

Mitchell—Dr. T. J. Ratliff, Colorado; 2nd Monday January, April, July and October.

Nolan—Dr. A. A. Chapman, Sweetwater.

Scurry-Dickens-Kent—Dr. J. M. Bannister, Snyder; 1st Tuesday in January, April, July and October.

Taylor—Dr. L. J. Pickard, Abilene; 2nd Tuesday monthly.

PANHANDLE DISTRICT—No. 3.

Dr. W. C. Dickey, Memphis, Councilor.

District Society—Dr. T. D. Frizzell, Quanah, President; Dr. J. J. Crume, Amarillo, Secretary.

Secretaries of Sections—Surgery, Dr. F. B. Bryan, Childress; Medicine, Dr. E. H. Snyder, Canadian; Gynecology and Obstetrics, Dr. B. L. Jenkins, Clarendon; Pediatrics, Dr. S. P. Vinyard, Amarillo.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Childress—Dr. F. B. Bryan, Childress; 1st Tuesday monthly.

Collingsworth—Dr. H. B. Worley, Wellington; Tuesdays.

Dallam-Hartley-Sherman—Dr. R. L. Owens, Dalhart; 2nd Tuesday.

Donley—Dr. T. H. Ellis, Clarendon; 1st Thursday monthly.

Foard—Dr. R. L. Kincaid, Crowell; 2nd Monday quarterly.

Hale-Swisher—Dr. E. F. McClendon, Plainview; 1st Tuesday monthly.

Hall—Dr. W. C. Mayes, Memphis; 2nd Tuesday monthly.

Hardeman—Dr. T. D. Frizzel, Quanah; 2nd Thursday monthly.

Hemphill-Roberts-Lipscomb-Ochiltree—Dr. H. C. Caylor, Canadian; 1st Monday monthly.

Lubbock-Crosby—Dr. J. T. Hutchinson, Lubbock; 1st and 3rd Tuesdays monthly.

Potter—Dr. J. J. Crume, Amarillo; 2nd Monday monthly.

Wichita—Dr. L. F. Stripling, Wichita Falls; 2nd Tuesday monthly.

Wilbarger—Dr. Richard W. Hix, Vernon; 3rd Monday monthly.

SAN ANGELO DISTRICT—No. 4.

Dr. S. C. Parsons, San Angelo, Councilor.

District Society—Dr. J. M. Horn, Brownwood, President; Dr. R. H. Cochran, Coleman, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Brown—Dr. H. C. Eargle, Brownwood; 2nd Tuesday monthly.

Coleman—Dr. R. Bailey, Coleman; 1st Thursday monthly.

Lampasas—Dr. W. D. Francis, Lampasas; 1st Tuesday March, June, September and December.

McCulloch—Dr. J. S. Anderson, Brady; 1st Monday monthly.

Menard-Kimble—Dr. W. M. Fenley, Menard.

Runnels—Dr. E. R. Middleton, Winters; 2nd Thursday monthly.

Tom Green—Dr. G. W. Nibling, San Angelo; Tuesday before full moon.

SAN ANTONIO DISTRICT—No. 5.

Dr. W. A. King, San Antonio, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary. Next meeting will be held in Corpus Christi in September.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Atascosa—Dr. B. T. Yule, Charlotte; 2nd Tuesday monthly.

Bexar—Dr. W. H. Hargis, San Antonio; from October to May. 1st Thursday, Section on Eye, Ear, Nose and Throat; 2nd Thursday, Section on Medicine; 3rd Thursday, State Medicine, Public and Personal Hygiene; 4th Thursday, Obstetrics and Gynecology.

Comal—Dr. L. G. Wille, New Braunfels; 2nd Saturday quarterly.

Guadalupe—Dr. M. B. Brandenburger, Seguin; 1st Tuesday monthly.

Gonzales—Dr. W. T. Dunning, Gonzales; 1st Monday monthly.

Karnes—Dr. R. C. Youngblood, Falls City; bi-monthly.

Kerr-Kendall-Gillespie-Bandera—Dr. Wm. Lee Secor, Kerrville; 1st Monday alternate months.

La Salle-Frio—Dr. R. L. Graham, Cotulla; meets quarterly.

Medina—Dr. J. H. Fletcher, Hondo; 2nd Wednesday monthly.

Uvalde-Edwards—Dr. S. B. Hudson, Sabinal; 1st Tuesday monthly.

Val Verde—Dr. D. A. York, Del Rio; 1st Monday monthly.

Wilson—Dr. J. E. Sparks, Floresville; quarterly.

The Guadalupe, Gonzales and Caldwell County Medical Societies held a joint meeting at Luling, July 13th. The following program was rendered: *Treatment of Gonorrhea in the Male and the Possible Danger of Non-cured Cases*, Dr. E. A. Benbow; *Ectopic Gestation*, Dr. M. B. Brandenburger; *Bowel Complaint of the Little Ones*, Dr. Wm. Meyers; *Can We Diagnose Appendicitis?* Dr. P. I. Nixon; *Syph-*

ilis and Its Influence Upon the Mind, Dr. Cranz Nichols; *Diagnosis of Pellagra*, Dr. W. T. Dawe; *Operations Upon the Foot*, Dr. Z. T. Scott; *Medical Inspection of School Children*, Dr. A. A. Ross.

CORPUS CHRISTI DISTRICT—No. 6.

Dr. W. N. Wardlaw, Corpus Christi, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary. Next meeting will be held in Corpus Christi in September.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bee—Dr. E. P. Cays, Beeville; Monday quarterly.
Camcron—Dr. C. W. Skipper, Brownsville; 2nd Wednesday monthly.
Hidalgo—Dr. W. R. Dashiell, Mission; 5th day monthly
Jim Wells—Dr. M. J. Perkins, Alice.
Kleburg—Dr. R. L. Mathews, Kingsville.
Nueces—Dr. A. W. Davisson, Corpus Christi; 1st and 3rd Fridays monthly.
Refugio—Dr. Roy T. Goodwin, Sinton.
San Patricio—Dr. L. J. Manhoff, Aransas Pass.
Webb—Dr. E. H. Sauvignet, Laredo; 1st Wednesday monthly.

AUSTIN DISTRICT—No. 7.

Dr. T. J. Bennett, Austin, Councilor.

District Society—Dr. Z. T. Scott, Austin, President; Dr. W. A. Harper, Austin, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bastrop—Dr. T. B. Taylor, Elgin; 2nd Tuesday bimonthly.
Burnet—Dr. H. S. Garrett, Bertram.
Caldwell—Dr. Edgar Smith, Lockhart; 2nd Tuesday monthly.
Hays—Dr. P. J. Shaver, San Marcos.
Lee—Dr. C. M. Jones, Ledbetter; 1st Tuesday in June, September, December and March.
Llano—Dr. C. F. Darnall, Llano; 2nd Tuesday monthly.
San Saba—Dr. C. L. Behrns, Cherokee; 2nd Tuesday each month.
Travis—Dr. J. C. A. Eckhardt, Austin; 2nd Thursday monthly.
Williamson—Dr. E. M. Wood, Georgetown; 2nd Wednesday.

DEWITT DISTRICT—No. 8.

Dr. Walter Shropshire, Yoakum, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Colorado—Dr. W. G. Youens, Colorado; 2nd Wednesday February, April, June, August, October and December.
DeWitt—Dr. B. J. Nowierski, Yorktown; 3rd Wednesday monthly.
Fayette—Dr. C. M. Hoch, LaGrange.
Lavaca—Dr. Walter Shropshire, Yoakum; 2nd Tuesday monthly.
Matagorda—Dr. S. A. Foote, Bay City; 2nd Wednesday monthly.
Victoria-Calhoun—Dr. F. L. Sargeant, Victoria; 20th monthly.
Wharton-Jackson—Dr. W. B. Huey, El Campo; 3rd Friday monthly.

THE DEWITT COUNTY MEDICAL SOCIETY met July 21st, at Cuero. Eleven members were in attendance. Dr. H. Brown, Jr., was a visitor. Dr. Eckhardt read an excellent paper on *Pellagra*, which was thoroughly discussed.

SOUTHERN DISTRICT—No. 9.

Dr. W. W. Ralston, Houston, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Austin—Dr. Otto E. Steck, Bellville; 1st Tuesday quarterly.
Brazos—Dr. R. J. Hunnicutt, Bryan.
Brazoria—Dr. A. J. Pollard, Alvin; 1st Thursday after 1st Monday.
Burleson—Dr. T. L. Goodnight, Caldwell.
Fort Bend—Dr. R. M. Munroe, Richmond.
Galveston—Dr. M. L. Graves, Galveston; last Friday monthly.
Grimes—Dr. E. A. Harris, Navasota; 1st Wednesday monthly.
Harris—Dr. B. T. Van Zant, Houston; every Friday night.
Madison—Dr. J. E. Morris, Madisonville; last Tuesday monthly.
Montgomery—Dr. H. W. Earthman, Conroe; 2nd Monday monthly.
Waller—Dr. R. E. Bing, Waller; 1st Monday quarterly.
Walker—Dr. J. W. Thomason, Huntsville; 2nd Tuesday bi-monthly.
Washington—Dr. R. H. Lenert, Brenham; quarterly.

SOUTHEASTERN DISTRICT—No. 10.

Dr. A. R. Sholars, Orange, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thompson, Beaumont, Secretary. Next meeting in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Hardin—Dr. Lee Selman, Olive; last Saturday monthly.
Jasper-Newton—Dr. D. McMicken, Kirbyville; 4th Wednesday quarterly.
Jefferson—Dr. B. P. Holland, Beaumont; 1st Monday monthly.
Nacogdoches—Dr. T. J. Blackwell, Nacogdoches; 2nd Wednesday monthly.
Orange—Dr. A. R. Sholars, Orange; 1st Tuesday monthly.
Polk—Dr. T. H. Bates, Camden; 1st Wednesday monthly.
Sabine—Dr. W. T. Arnold, Jr., Hemphill; 2nd Wednesday monthly.
Shelby—Dr. J. H. Windham, Shelbyville; 2nd Tuesday monthly.

THE POLK COUNTY MEDICAL SOCIETY held its July meeting at Onalaska, on the 7th. The program was opened with the presentation of three very interesting cases of pellagra by Dr. S. E. Wisdom. The patients were negro women ranging from 17 to 40 years of age. The possibility of contagion and the influence of any debilitating condition as a predisposing factor, was discussed. The concensus of opinion was that pellagra is not contagious, and that debilitating illness, diet, hygiene and exposure, are very potent predisposing factors. The three patients gave individual histories of gynecological disorders for at least two years prior to the beginning signs of pellagra.

Dr. Wisdom also exhibited a patient with a double hydrocele of 14 months duration, whom he was to operate upon and present at a subsequent meeting.

Dr. S. L. Autrey read a paper on *Gastroenteritis*. The discussion was very interesting, and Dr. Autrey was given a vote of thanks for the excellent paper.

After a sumptuous banquet at the Millerview Hotel, the business session was called, and Corrigan was selected as the next place of meeting. Physicians of adjoining counties are always welcome.

DISTRICT PERSONALS.—Dr. H. Bergman, Livingston, has returned from St. Louis where he has been for four weeks doing postgraduate study in Washington University summer school.

Dr. T. F. Harris, New Willard, has recently returned after six weeks at the New Orleans Polyclinic.

Dr. Judson L. Taylor, Houston, spent a few days with his brother, Dr. M. J. Taylor at Camden, while on his way home from Philadelphia where he has been for the past year as one of the clinical assistants to Dr. J. Chalmers Dacosta.

Dr. J. B. Turner recently of Gladstell, Liberty County, has removed to Carmona.

EASTERN DISTRICT—No. 11.

Dr. C. C. Nash, Palestine, Councilor.

District Society—Dr. E. B. Parsons, Palestine, President; Dr. E. H. Vaughn, Tyler, Secretary. Next meeting in Palestine in September.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Anderson—Dr. E. B. Parsons, Palestine; 1st Monday monthly.
Angelina—Dr. J. C. Van Nuys, Lufkin; 1st Tuesday monthly.
Cherokee—Dr. T. H. Cobble, Rusk; 4th Tuesday monthly.
Freestone—Dr. E. V. Headlee, Teague; 1st Tuesday monthly.

Henderson—Dr. A. H. Easterling, Athens; 1st Mondays.
Houston—Dr. W. W. Latham, Crockett; 2nd Tuesday monthly.
Leon—Dr. V. L. Smith, Jewett; 1st Tuesday in April; 2nd Tuesday in October.
Panola—Dr. A. M. Baker, Carthage.
Rusk—Dr. W. P. White, Henderson; 2nd Tuesday quarterly.
Smith—Dr. L. P. Tenney, Troup; 2nd Tuesday monthly.
Trinity—Dr. W. H. Pope, Jr., Trinity; 3rd Thursday quarterly.

The Cherokee County Medical Society met at Rusk, July 4th. Ten members were present. Dr. Frank D. Boyd, Fort Worth, was present and made an excellent talk on *The Duty of One Physician to Another.*

The Freestone County Medical Society met April 6th, at Teague. Nine members were present. Drs. J. D. Davidson and J. W. Bond, Donie, and Dr. W. A. Suttle, Freestone, were elected to membership.

The Eleventh District Medical Society was reorganized by Councilor C. C. Nash, June 24th at Palestine. The following program was rendered: *Address of Welcome*, Dr. J. H. Grant, Palestine; *Surgery of the Tonsils*, Dr. R. W. Dunlap, Palestine; *Treatment of Hysteria*, Dr. N. D. Buie, Marlin; *Detachment of Retina, With Report of Case*, Dr. E. H. Vaughn, Tyler; *Some Cystoscopic Findings*, Dr. Harvin C. Moore, Houston; *Report of Surgical Cases*, Dr. W. Burton Thorning, Houston; *Acute Perforative and Gangerous Appendicitis*, Dr. A. L. Hathcock, Palestine; *Some X-ray Photographs*, Dr. B. T. Van Zant, Houston. The papers and discussions were of an exceptionally high scientific order.

The following officers were elected: President, Dr. E. B. Parsons, Palestine; vice-president, Dr. N. A. Davidson, Buffalo; secretary-treasurer, Dr. Edgar H. Vaughn, Tyler. The meetings were held at the Redlands Hotel. The next meeting will be held in Palestine. A number of talks were made for the good of the society. The local profession entertained the visitors by showing them the interesting places in and around Palestine, which included a visit to the two private sanitariums and the I. & G. N. Ry. Hospital.

The meeting was well attended, but a still larger attendance is expected at the September meeting. The doctor who stays away from medical meetings is especially invited. All others are expected.

District Personal.—Dr. J. M. Crawford, Alto, was quite ill during June and July.

CENTRAL DISTRICT—No. 12.

Dr. A. C. Scott, Temple, Councilor.

District Society—H. C. Black, President; Dr. H. F. Connally, Waco, Secretary. Next meeting will be in Corsicana, July 13 and 14, 1915.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bosque—Dr. C. C. Cate, Morgan; 1st Wednesday.
Bell—Dr. L. R. Talley, Temple; 1st Wednesday quarterly.
Comanche—Dr. Charles Ory, Comanche; 1st Thursday monthly.
Coryell—Dr. Ed. Graves, Gatesville; last Wednesday bi-monthly.
Erath—Dr. S. D. Naylor, Stephenville; 2nd Wednesday bi-monthly.
Falls—Dr. Aug. Streit, Marlin; 1st and 3rd Mondays.
Hamilton—J. H. Wysong, Hico; 2nd Wednesday monthly.
Hill—Dr. J. E. Boyd, Hillsboro; 2nd Friday.
Hood-Somervell—Dr. G. D. Ross, Paluxy; Wednesday before the full moon.
Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.
Limestone—Dr. M. M. Brown, Mexia; 3rd Thursday bi-monthly.
Milam—Dr. G. B. Taylor, Cameron; 2nd Tuesday bi-monthly.
McLennan—Dr. D. L. Eastland, Waco; 1st Tuesday.
Navarro—Dr. W. D. Cross, Corsicana; 1st Monday.
Robertson—A. J. Sharp, Franklin; 2nd Tuesday bi-monthly.

The Central Texas District Medical Society met in Corsicana, July 12-13th, 1915. The meeting was well attended and there were some excellent papers read, all of which were freely discussed.

Dr. W. T. Wilson of Navasota, read a paper on *Pellagra*, which was well received and very liberally discussed. The paper showed that the doctor had done some excellent work along the line discussed by him. He reported about one hundred cases of pellagra treated with picric acid, with almost perfect results.

The society was never more highly entertained than on this occasion.

The next meeting will be held in Temple, on the second Tuesday and Wednesday in January, 1916.

District Personal.—Dr. J. M. F. Gill of Cameron, has been appointed surgeon to the Confederate Home at Austin.

NORTHWESTERN DISTRICT—No. 13.

Dr. J. H. Ball, Crystal Falls, Councilor.

District Society—Dr. J. H. Eastland, Mineral Wells, President; Dr. R. A. Duncan, Graham, Secretary. Next meeting will be in Mineral Wells, October 12-13.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Baylor—Dr. C. E. Johnson, Seymour; 2nd Tuesday.
Clay—Dr. B. M. Puckett, Henrietta; 2nd Wednesday.
Eastland—Dr. W. P. Lee, Cisco; 2nd Tuesday bi-monthly.
Parker-Palo Pinto—Dr. E. A. Davis, Mineral Wells; 2nd Tuesday monthly.
Stephens—Dr. J. H. Ball, Crystal Falls; 1st Tuesday quarterly.
Throckmorton—Dr. D. C. Wylie, Throckmorton.
Young—Dr. W. H. Logan, Graham; 2nd Tuesday bi-monthly.

NORTHERN DISTRICT—No. 14.

Dr. A. W. Carnes, Hutchins, Councilor.

District Society—R. W. Baird, Dallas, President; Dr. H. L. Moore, Dallas, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Collin—Dr. B. F. Largent, McKinney; 1st Tuesday.
Cooke—Dr. J. R. Lewis, Gainesville; 2nd Tuesday.
Dallas—Dr. R. S. Loving, Dallas; 2nd and 4th Thursdays.
Delta—Dr. C. C. Taylor, Cooper; 1st Monday.
Denton—Dr. W. G. Kimbrough, Denton; Tuesday following 1st Monday.
Ellis—Dr. E. F. Gough, Waxahachie; 2nd Tuesday.
Fannin—Dr. E. H. H. Foster, Bonham; 2nd Thursday monthly.
Grayson—Dr. Davis Spangler, Sherman; 1st Tuesday.
Hopkins—Dr. J. H. Holbrook, Sulphur Springs; 1st Wednesday.
Hunt—Dr. M. L. Wilbanks, Greenville; 2nd Tuesday.
Kaufman—Dr. B. J. Hubbard, Kaufman; 1st Tuesday, February, April, June, August, October and December.
Lamar—Dr. W. W. Fitzpatrick, Paris; 1st Thursday.
Montague—Dr. C. F. Young, Bowie; 2nd Tuesday monthly.
Tarrant—Dr. J. J. Richardson, Fort Worth; 1st and 3rd Fridays.
Van Zandt—Dr. D. L. Sanders, Wills Point; 1st Friday.
Wise—Dr. L. H. Reeves, Decatur; 3rd Tuesday each month.

The Dallas County Medical Society met June 24th. Dr. M. E. Taber reported a case in which a lemon seed had lodged in the bronchial tube of the left lung, producing extensive inflammation. The bronchoscope revealed the condition.

Dr. B. S. Bruce reported a case in which eclampsia occurred after delivery, followed by death 18 hours after the first convulsion.

Dr. O. M. Marchman reported a ruptured gall bladder with extensive peritonitis. Operated after eight days, disclosing adhering masses of omentum and bowel containing pus and bile.

Dr. C. M. Rosser reported sudden death in a man 77 years old, who had been admitted to the hospital with a malignant condition of the jaw. No treatment other than cauterization had been done.

Dr. C. M. Grigsby reported the delivery of an acephalic monstrosity which lived twenty-four hours, cried and took nourishment.

Dr. J. B. Shelmire reported two interesting cases of urticaria.

Dr. H. L. Moore read a paper on *Protein Milk Diet in Infantile Diarrhea.* He said that under the use of this diet the initial dose of castor oil and the period of starvation had been discontinued, and the patients recovered promptly without medication.

Dr. Homer Donald read a paper on *The Diagnosis of Incipient Phthisis* in which special stress was laid upon repeated auscultatory examinations of the naked chest, and also the presence of fever. He does not attach much importance to the Von Pirquet. The paper was discussed by Drs. Grigsby, Taber, Flynn and Martin.

Dr. E. J. Reeves stated that it was his belief that the society should investigate the opportunity offered to establish an Academy of Medicine in Dallas through the purchasing of the Southern Methodist College building. Upon motion President Watson appointed a committee to investigate the matter and report at the next meeting. Those appointed were Drs. Reeves, Doolittle, Grigsby, Smoot and Shelmire.

A motion was passed that the society take a recess until the first regular meeting in October.

Dr. L. O. Godley of Garland was elected on transfer from the Tarrant County Medical Society.

The Hunt County Medical Society and the Collin County Medical Society held a joint meeting in Farmersville, July 20th. The address of welcome was delivered by Dr. J. H. Hicks of Farmersville and responded to by Dr. A. W. Carnes, Councilor, of Hutchins.

The scientific program was opened with a symposium on *Typhoid Fever.* It consisted of a paper on *Prevention of Typhoid Fever by Inoculation* by Dr. J. C. Erwin, McKinney, and *Treatment of Typhoid Fever, With Special Reference to Diet* by Dr. W. M. Dickens, Greenville. Discussions were by Drs. J. D. Burt, Farmersville, B. F. Largent, McKinney, M. L. Wilbanks, Greenville, A. W. Carnes, Hutchins and A. S. McBride, Greenville. All agreed on the importance of giving clear and specific directions for the care of the patients and liberal amounts of proper foods given systematically.

Dr. J. D. Burt read a paper on *Epithelioma,* which was discussed by Drs. B. F. Largent, J. C. Erwin, E. L. Burton and A. S. McBride. They agreed that the disease is curable if excised early. No simple tumor should be left in a woman's breast, it being a simple operation to remove a benign tumor.

Dr. Joe Becton read a paper on *Neurosis of the Kidney From a Surgical Viewpoint, and Its Relief,* which was discussed by Drs. Largent, B. F. Wright, J. H. French and W. T. Beall.

Dr. B. F. Largent presented the subject of *Gastric and Duodenal Ulcers.* The paper was discussed by Dr. Dickens who urged the use of the Lonhardte diet in cases of gastric ulcer. He said that some men in New York claimed that the removal of the appendix would relieve the condition. Dr. Burt said many gastric and duodenal ulcers are due to pyorrhea, and that diet will relieve the acidity of the stomach. Dr. Carnes said that Brewer's yeast is good, not only in such ulcers but in carbuncles, boils, etc. If Brewer's yeast is not obtainable, the common yeast cake may be used, giving 1/9 of an yeast cake three times per day.

Dr. Rodney Neathery reported a case of ptomaine poisoning that lasted through several weeks.

Dr. Joe Becton reported a case of appendicitis and made a plea for early operation in every case.

A resolution was passed thanking the Collin County profession, that of Farmersville in particular, and the ladies of Farmersville, for the good time and the elegant entertainment offered the visitors.

The following were present: Drs. J. H. Hicks, W. T. Beall, J. B. Wright, J. D. Burt, Rodney Neathery and D. M. Yeary of Farmersville; J. E. Gibson, J. C. Erwin and B. F. Largent, McKinney; B. F. Grounds, Blue Ridge; A. C. Corley, Rockwall; E. L. Davis, Princeton; W. M. Dickens, A. S. McBride, J. W. Ward, J. H. French, Joe Becton, M. L. Wilbanks, Greenville; A. W. Carnes, Hutchins; Franklin Young, Chicago, and F. U. Meadows, Greenville, visitors.

The following are new members of the Hunt County Medical Society: Drs. S. D. Fry, Ladonia; J. J. Handley, Greenville; S. R. Wheatley, Commerce, and G. W. Luckey, Wolfe City.

The Tarrant County Medical Society met in regular session July 2nd. Dr. J. H. McLean presented a pathologic specimen, an enlarged uterine tube, presenting a bowed or horn-shaped appearance about the size of a cow's horn and 5 to 6 inches long. The patient was a woman 48 years old and had not borne children in several years. When he first saw her she was suffering with pain in the lower abdomen, not localized; temperature normal. Vaginal examination revealed a freely movable uterus and a large cystic mass to the left.

Dr. Chase gave a very interesting and instructive lecture in which he illustrated the wide limits of the positions of the stomach both in health and disease. On account of the large number of *x*-ray photos to be shown he limited his remarks to the colon. The pictures were taken in series, that is, from 6 to 12 taken of the same person at fixed periods after an opaque meal. They were taken by leading roentgenologists, and the positions of the organs are at very wide variance, as shown by pictures in text-books of anatomy and descriptions of same. Many fallacies are perpetuated even in some of the very latest text-books. The introduction of formalin as preservative and fixture to the tissues and the universal use of opaque meals, injection of ureters, sinuses, etc., have necessitated change in a number of anatomical descriptions as to the size, shape and relative position of the organs. Dr. Chase emphasized the fact that the position of the transverse colon depended largely on its attachments at the right and left flexures and on the length of the transverse mesocolon. These attachments may be relatively low and the transverse mesocolon relatively long, and when this condition is present the transverse colon at its lowest limit may be in the pelvis and perfectly normal for that individual. The position of the person and the time as to when the opaque meal was taken, modifies to a large degree the limits of the transverse colon. This question of the position of the viscera is of great medico-legal importance, and to show one or two pictures of injured or alleged injured parts to a jury and make fixed deductions, is both absurd and unscientific. By request Dr. Chase promised to give an illustrated lecture early in the fall confining his remarks to the positions of the stomach.

The Tarrant County Medical Society met July 15th. The first number on the program was the presentation of five people by Dr. Hammack of Kennedale. Of these three were children who at this time last year were suffering from pellagra, the eruption being particularly bad, but who at this time were apparently well. The other two cases were men, one of whom was suffering from pellagra and the other evidently had a pyloric obstruction. The last case had been seen by one or two phy-

sicians present, and considerable work had been done towards making a complete diagnosis, such as tests for motility and position of the stomach, etc., and gastric analyses. Dr. Hammack laid considerable stress on the value in the treatment of pellagra, of water from certain wells in his section. The water has been analysed, but he did not have a written table of the same with him.

Dr. Gough next presented a case, that of a young lady who had been shown at the June meeting. A radical mastoid had been done, with a paralysis of the facial nerve following. He was reasonably certain the nerve was not cut at the time of the operation and subsequent events proved it had not been as the paralysis had entirely disappeared.

Dr. Bacon Saunders gave his impressions of the recent A. M. A. meeting, in his usual happy style, confining his remarks to the surgical section, and to certain general meetings.

District Personals.—Mrs. Cammie R. Carrick, mother of Dr. Manton M. Carrick, Dallas, died after a lingering illness on July 8th. She was a prominent church and club woman, and devoted much of her time and means to charitable and sociologic work. She worked faithfully for the passage of the bill providing for the State Tuberculosis Sanitarium at Carlsbad, and by her will provided generously for the care of tuberculosis patients in a Dallas hospital.

Dr. and Mrs. Holman Taylor, Fort Worth, attended the San Diego and San Francisco Expositions during the latter part of July.

Dr. Scurry L. Terrell, Dallas, is now in France, serving with the English army as a surgeon. He is attached to the unit organized by Dr. John B. Murphy of Chicago.

NORTHEASTERN DISTRICT—No. 15.

Dr. W. H. Blythe, Mt. Pleasant, Councilor.

District Society—Dr. C. A. Smith, Texarkana, President; Dr. J. N. White, Texarkana, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bowie—Dr. E. M. Watts, Texarkana; 4th Friday.
Camp—Dr. R. Y. Lacy, Pittsburg; 1st Wednesday.
Cass—Dr. J. T. Herndon, Linden; 1st Wednesday.
Franklin—Dr. Z. C. Fuquay, Mount Vernon; 1st Tuesday.
Gregg—Dr. W. D. Northcutt, Secretary.
Harrison—Dr. J. B. Baldwin, Marshall; 1st Tuesday.
Marion—Dr. S. A. Miller, Jefferson; 1st Thursday monthly.
Morris—Dr. R. C. Farrier, Omaha; 1st Tuesday quarterly.
Titus—Dr. W. H. Blythe, Mount Pleasant; 2nd Tuesday.
Upshur—Dr. T. S. Ragland, Gilmer; 2nd Tuesday.
Wood—Dr. V. E. Robbins, Quitman; last Friday monthly.

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

W. H. Hargis, President.....San Antonio.
W. H. Blythe, Vice-President.....Mt. Pleasant.
H. L. Wilder, Secretary-Treasurer.....Glen Rose.

NEW AND REINSTATED MEMBERS.

July 1 to August 1, 1915.

Bexar County—G. G. Watts, San Antonio; B. F. Smith, San Antonio.
Dallas County—S. R. Milliken, Dallas; E. Aronson, Dallas; J. H. Stephenson, Dallas.
Fayette County—J. T. Buchanan, Cistern.
Hale-Swisher County—E. L. Dye, Tulia.
Hill County—E. D. Rice, Holder.
Nacogdoches County—T. A. Mast, Chireno.
Nueces County—W. E. Carruth, Corpus Christi.
Polk County—S. L. Autrey, Onalaska.
Potter County—G. S. Murphy, Amarillo.
Red River County—W. H. McDonald, Clarksville; D. Edrington, Avery; C. D. Scaff, Clarksville; N. A. Watson, Clarksville; Gavin Watson, Clarksville; W. L. Durrum, Madras; J. A. Seay, Clarksville; R. A. Dinwiddie. Clarksville; C. F. Cronkrite, Clarksville; J C. Durrum, Clarksville.
Rusk County—Chester A. Shaw, Pinehill.
Tarrant County—J. M. Mullins, Fort Worth.
Victoria-Calhoun County—T. O. Woolley, Germantown.
Young County—W. O. Padgett, Graham.

CHANGES OF ADDRESS.

Dr. E. J. Burns, from Temple to Carrizo Springs.
Dr. C. R. Carver, from San Angelo to Goldthwaite.
Dr. W. M. Dodson, from Marianna to Woodsboro.
Dr. W. A. Graham, from McAllen to Cross Plains.
Dr. D. C. Wylie, from Throckmorton to Swenson.
Dr. T. D. Holder, from Hermleigh to Holder.
Dr. J. H. Herndon, from Miles to Sweetwater.
Dr. C. E. Donnell, from McLean to Tulia.
Dr. J. L. McGehee, from Burkburnett to Sulphur Springs.
Dr. G. Schulze, from Gonzales to Shiner.
Dr. Thos. Freundlich, from Palestine to Galveston.
Dr. J. B. Turner, from Lovelady to Carmona.
Dr. E. C. Blackwell, from Sipe Springs to Gorman.
Dr. W. L. Peters, from Corpus Christi to Refugio.

THE HISTORY AND PURPOSES OF THE STATE ASSOCIATION OF COUNTY SECRETARIES.

BY

FRANK G. SANDERS, M. D.,

FORT WORTH, TEXAS.

The medical profession has for years realized the value of organization, for the reasons outlined under article 11 of the Constitution governing County Medical Societies; and as these organizations have developed the importance of good secretaries has been fully recognized.

At the Dallas meeting of the State Medical Association, in 1910, pursuant to the call of the President, Dr. W. B. Russ, and the Board of Councilors, and a large number of County Secretaries met in the hall of the House of Delegates at 4 p. m., May 11th, and perfected the Association of County Secretaries. The meeting was called to order by Dr. Jno. T. Moore, chairman of the Board of Councilors, who stated the object of the call and outlined the possible scope of the movement. Dr. A. W. Nash of Dallas, served as temporary secretary. Drs. W. B. Russ, I. C. Chase and others made short talks on the subject and papers relative to the work were presented by Drs. W. H. Blythe of Mt. Pleasant, B. J. Hubbard of Kaufman and F. P. Miller of El Paso. Permanent organization was effected and the following officers were elected: President, E. F. Cooke, Houston; Vice-President, C. H. McCollum of Hico; Secretary, A. W. Nash of Dallas. It was unanimously decided at this meeting that each county society represented be asked for a contribution of one dollar, to defray the expenses of the organization.

The second annual meeting was held May 10, 1911, during the Amarillo meeting of the State Medical Association. The president, vice-president and secretary, were all absent and Dr. Frank D. Boyd acted as president with Dr. J. E. Robinson as secretary. Constitution and By-Laws, as printed in the April, 1911, Journal, were adopted. A short but interesting program was carried out. The election of officers for 1911-1912, resulted as follows: President, Dr. B. E. Greer, Dallas; First Vice-President,

Dr. C. C. Black of Georgetown; Second Vice-President, Dr. Caroline Mitchell of San Angelo; Secretary-Treasurer, Dr. J. E. Robinson of Temple.

The next meeting was held during the Waco session of the State Association, May, 1912. All officers were present and the program was carried out completely as arranged. The papers were freely and intelligently discussed, many of the societies were represented and the Secretaries' Association seemed now to be fulfilling many of the purposes for which it was organized. The election of officers resulted as follows: President, Dr. Thomas Dorbandt, San Antonio; Vice-Presidents, Drs. J. S. Calhoun, Henrietta, and J. H. Cochran, Coleman; Secretary-Treasurer, Dr. J. E. Robinson, Temple.

The next meeting was held at San Antonio, May, 1913. That the work was progressing favorably was shown by the number and class of paper read—about eight—the discussions, attendance and interest in general. Another feature of this meeting worth mentioning, was the presence of several of the Councilors. Their attendance had been urged before but only a few had ever been present. I think this was largely due to their enforced attendance on the House of Delegates. At this meeting the following officers were elected: President, Dr. J. E. Robinson of Temple; Vice-Presidents, Drs. W. F. Thomson of Beaumont, and W. H. Blythe of Mt. Pleasant; Secretary-Treasurer, Dr. C. E. Scull, San Antonio.

The next meeting was held at Houston, May 13, 1914. Twelve papers were read out of a total of fifteen on the program. This included a very interesting, instructive, as well as encouraging, address by Dr. Alex R. Craig, the well known Secretary of the American Medical Association. For some unaccountable reason the Section did not begin promptly, a fact that I regretfully recall, and we did not receive the support and encouragement of as many of the councilors as we deserved, in my opinion. This meeting will go down in history, however, as a very profitable one, I am sure, and I feel certain that every society whose secretary was present had a better secretary after the meeting. The election of officers resulted as follows: President, Dr. Frank G. Sanders, Fort Worth; Vice-Presidents, Drs. W. H. Hargis, San Antonio, and W. H. Blythe, Mt. Pleasant; Secretary-Treasurer, Dr. H. L. Wilder of Glen Rose.

Thus we have, briefly stated, the history of this organization, date of birth of which is recorded in the archives of the State Medical Association of Texas as May 11th, 1910, and the growth of which has not been interrupted up to this good day.

The purposes of this organization are obvious to all who would give the question a few moments of careful thought. One purpose that stands out boldly is that by frequent meetings, frank interchange of views, etc., we will become more efficient secretaries. This is merely a means to an end—that by being better secretaries we can serve our societies better, thereby making them better societies; and that leads on to the making of better doctors, the ultimate aim of organized medicine. Those who were instrumental in organizing the county secretaries, who had the interests of the medical profession of this great state at heart, who had pondered over these questions almost *ad infinitum*, were not wrong in their conclusions, and their work will live after them.

I do not think as many secretaries attend these meetings as should and easily could. I know that at every meeting since the organization of this Section many secretaries are in attendance on the general sessions who do not attend the meeting of the Secretaries. This should not be the case, and I wonder if a secretary who thinks he is too big for the meeting, or the meeting of too little importance for him, is of any value to his society. Each county society should make an effort to have its secretary attend these meetings even to the extent of paying all or a part of the expenses of the trip.

Another purpose of this organization is to educate the secretary along the line of his duties. The best text-book for the purpose is the State Journal, from cover to cover, especially the Editorials and the pages devoted to Society Administration and Society News. Bulletins from county societies, are also good for the purpose. Most of our shortcomings have been sins of omission; particularly in the matter of reporting promptly to the State Secretary's office the results of the annual elections. I am in close touch with the State Secretary's office and I know such negligence is quite common and inexcusable. The same may be said in regard to the annual reports, from which the State Secretary compiles his annual report. What would the State Medical Association think of its secretary if he should announce at the annual meeting that he did not have his report ready? Some of the secretaries delay until the last minute; think what this means to the office of the State Secretary.

One other important thing: Keep in close touch with the Councilor; he can be of great assistance to you, and likewise you can be one of a number to make a dead or a live district. One Councilor wrote me a few days past that he had received an annual report from every secretary in his district except two, and was reasonably sure those would be in before the meeting in Fort Worth. That was good—much better than many, for up to five or six days past, some thirty secretaries had not sent in their reports.

In closing, I want to beg your indulgence for reciting things you already know; but for the benefit of some of the newer secretaries, I thought a short review of the history of this body would not be amiss.

DEATHS

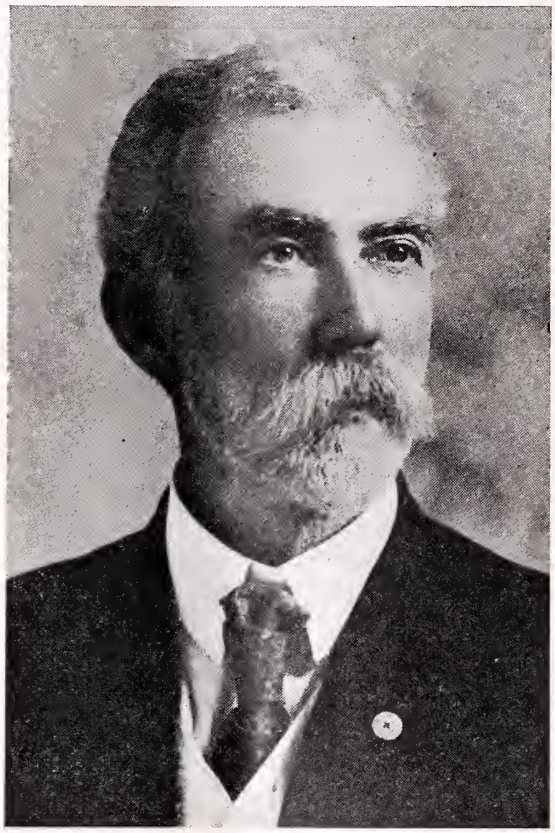
Dr. R. Robinson of San Antonio, died at his home May 20th, from cerebral hemorrhage. He was born in Russia in 1861 and was 54 years old at the time of his death. He graduated from the University of Dorpath, Russia, as a pharmacist and for many years engaged in that profession. He obtained his education under difficulties, having to teach school at night by the light of homemade tallow candles, in order to earn his expenses. Afterwards he became ambitious to be a doctor but he could not enter any medical college in Russia on account of his age. He came to America and located in Omaha, Nebraska, where he had relatives, and at the age of 32 entered the Omaha Medical College, from which institution he graduated with highest honors in the class of 1896. He overcame the handicap of deficiency in the English language by taking a course in English at night. He learned quickly, on account of his intimate knowledge of Latin, which was of great assistance to him.

In 1897 he married Miss Rose Levy of Omaha. In 1899, with his wife and infant son, he moved to San Antonio, which place was his home until the time of his death.

He was a former member of the Bexar County Medical Society, his membership lapsing on account of his protracted illness. He was a member of the W. O. W., the I. O. B. B. and Brith Abram orders, and worshipped in the Agudas Achim Orthodox Jewish Synagogue. He was loved and respected by all who knew him, and he especially endeared himself to his patients by his kindly, gentle manner.

He was always a friend to the poor and needy, and at the sacrifice of his own health he would go to those who needed his service.

Dr. James Howard Taylor of Marshall, died at his home, July 6th, 1915, following an illness of some months duration. Dr. Taylor was born in Marshall, January 4th, 1851, and was reared to manhood on his father's plantation six miles west of the city. He received his preliminary education in the then famous Marshall University, taking his medical degree from Bellevue Hospital Medical College of New York in the class of 1871, shortly following the attainment of his majority. He entered the practice of medicine at Hallsville, in the county of his birth, which was at the time the principal headquarters of the Texas and Pacific Railway. He removed to Marshall in 1881, where he continued the



Dr. James Howard Taylor.

practice of his profession until a few months prior to his death.

In 1873 he married Miss Mollie A. Howard, daughter of Major A. P. Howard of Harrison County, a prominent citizen and pioneer planter of East Texas. To this union were born four children, three of whom, Dr. Holman Taylor of Fort Worth, Mrs. E. B. Hayes of Marshall and Mrs. R. Y. Walker of Belton, survive him, and were, together with their mother, with him at the last.

Dr. Taylor came of rather noted parentage. His father, Colonel James F. Taylor, was a pioneer planter and large slave owner of East Texas, in the early days of the State's history. He served in both branches of the State Legislature in the day of great men in Texas statesmanship and later, during the civil war, received a commission from the Confederacy, although his age precluded service at the front. He was also prominent in Masonic circles, having served as Grand Master and Grand High Priest. The James F. Taylor lodge at Hallsville, was so named in recognition of his services to Masonry. His mother, a native of Massachusetts, was a cousin of Luther Burbank, and had his predilection for plants, and his knack for handling them. She was likewise interested in astronomy, and was considered at the time quite an authority on that subject.

Dr. Taylor served his profession with distinction and his community with credit. He early attained an extensive practice, which he continued to enjoy to the limit of his capacity for work until stricken with his fatal illness. He was one of the few remaining "family physicians" who had kept apace with the rapidly advancing science of medicine. He had not specialized, and until his enforced retirement had continued to do such work in a medical way as came to hand, and for which he could hold himself responsible. At the time of his death he was chief surgeon of the Marshall and East Texas Railway, which position he had held with this road and its predecessors for many years. During the receivership of the Texas and Pacific Railway, he served as chief surgeon of that road, his connection therewith terminating with the receivership. He had only recently resigned the position of Grand Medical Examiner of the Ancient Order of United Workmen of Texas, which position he had held for thirty years. His service with this order began when the jurisdiction included Arkansas, Texas, Oklahoma and Louisiana. It is said of him that he materially reduced the death rate in this order, and made it a safe organization from that standpoint. He continued to serve as Supreme Representative of that organization from this state to the National body. He served as county physician for more than thirty years, continuously, and until a short while before his last illness. He was an accomplished Mason and was looked upon by the local bodies as a leader and teacher in the work. He had served through all the chairs of the several local bodies, and was at the time of his death Prelate in the Commandery of Knights Templar. He had also served as district deputy grand master.

Dr. Taylor had always been a warm supporter of organized medicine, and had served his county society as president and censor. His interest in state and national organizations had been subordinated to that of his son, Dr. Holman Taylor, who, for ten years and until his removal to Fort Worth and assumption of the office of Secretary, had practiced medicine with him at Marshall.

Dr. Taylor was a life long member of the Methodist Church, South. The funeral services were conducted by the Masonic order. He was buried in Greenwood Cemetery at Marshall.

It is difficult to estimate the value of such a life, and it is sad to contemplate that time will remove all knowledge of the service he has rendered mankind. A large practice for more than the average lifetime failed to net him more than a competency for himself and his dependent family during their natural dependency and expectancy, and it is possible that the riches that might have been his will serve as his crown, if not his monument.

Dr. George P. Hall of Houston, died June 9th, at his home, following an illness of two months.

Dr. Hall was 58 years of age and had lived in Houston for 14 years. He was a graduate of the Louisville Medical School, receiving the degree of M. D. from that institution March 1, 1877. He also attended Jefferson College, Philadelphia, receiving an M. D. from that institution in 1878. He was born in Sumter County, Alabama, and was brought to

Texas by his parents at the age of 5 years, who settled at Courtney, Grimes County.

Upon the conclusion of his college career he married Miss Francis Malone of Louisville, Ky., and returned to Texas to engage in the practice of his profession. For nine years Dr. Hall practiced in Galveston. He moved to Houston in 1901 and has been a resident of this city continuously since. He was prominent in eye, ear, nose and throat work in his section of the state. He was a member of the American Medical Association, the State Medical Association and the Harris County Medical Society. He was an active member of the First Presbyterian Church and gave generously to charity. His body was shipped to Navasota, where it was interred beside his father and mother. Pall bearers were furnished by the Harris County Medical Society.

Dr. Edward C. Schoonmaker of Mercedes, died July 4th, as a result of a pistol wound, self inflicted. He was born in Kewanee, Illinois, August 10, 1871. He graduated in medicine from the University of Minnesota in 1899. He practiced in Minnesota for ten years, coming to Texas in 1909 and locating at Mercedes, at which place he practiced until his death. He was a member of the Hidalgo County Medical Society and the State and American Medical Associations. He was a Scottish Rite Mason and a Shriner.

Memorial services were held at Mercedes, July 12. The Presbyterian Church was not large enough to hold the friends who came from up and down the valley to show their respect to his memory. That the valley appreciated the irreparable loss it has sustained in the death of this gifted surgeon, a great and good man, was attested by the spirit in which five eloquent eulogies were delivered and received. All bore witness that the dead surgeon had become the most potential figure in the valley during the decade of his residence and had gained a place in the hearts of the people that will last. He was spoken of as a martyr because he had not only given the best years of his professional life, but his health and life itself to the people of the lower Rio Grande Valley.

Dr. Joel Hamlet Barham of Nacogdoches, died of multiple neuritis, June 11, 1915. He was born near Savannah, Tennessee, April 27, 1847, and came with his parents to Rusk County, Texas, in 1854.

After obtaining a practical education in the common schools of the country, he attended the Medical Department of the University of Louisville, graduating in March, 1876. In 1880 he graduated from the Medical Department of Tulane University. From time to time he took post-graduate courses in Baltimore, New York and other cities.

At Caledonia, Rusk County, Texas, he practiced medicine seven years and in 1883 moved to Nacogdoches, where he continued in the work of his profession until disabled a few months before his death.

On April 3, 1876, he was married to Miss Ruth Garrison. Five children were born to them—three boys and two girls. One died at nine years of age. The others, including Dr. George S. Barham, lived in Nacogdoches, and were with him during his long illness and at his death.

Dr. Barham was a worker for organized medicine. For many years and at various times he was President of the Nacogdoches County Medical Society. At its re-organization in 1912, he was made President. He was a Fellow of the American Medical Association, a Baptist and at one time was a member of the Knights of Pythias. He was a member of the Woodmen of the World at the time of his death.

In the passing of Dr. Barham, Nacogdoches loses a valuable physician and citizen.

Thirty-three years of his forty years of active practice were spent in Nacogdoches, to which came patients from all parts of the County and from other Counties, seeking his services. He enjoyed a lucrative practice, provided well for his family and left them in easy circumstances. In connection with his skill and culture, he possessed a rare sense of humor. He believed in laughter. A good anecdote makes a patient forget his pain; and he used it as a remedy in order that the mind might aid the body to combat the ravages of disease.

Dr. Barham was loved by all in the wide circle of his acquaintance. They appreciate the important life work of this soulful, cultured physician and revere his memory.

BOOK NOTES

Modern Medicine. Its Theory and Practice. In Original Contributions by American and Foreign Authors. Edited by Sir William Osler, Bart., M. D., F. R. S., Regius Professor of Medicine in Oxford University, England; formerly Professor of Medicine in Johns Hopkins University, Baltimore; in the University of Pennsylvania, Philadelphia, and in McGill University, Montreal; and Thomas McCrae, M. D., Professor of Medicine in the Jefferson Medical College, Philadelphia; Fellow of the Royal College of Physicians, London; formerly Associate Professor of Medicine in Johns Hopkins University, Baltimore. In five octavo volumes of about 1,000 pages each. Volume V. Diseases of the Nervous System; Diseases of the Locomotor System. *Just ready.* Price per volume, cloth, $5.00, net; half morocco, $7.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

This, the last of the thoroughly revised set, is, as are its predecessors, a fine piece of medical literature, and fully up to the high standard set by the other volumes. Its list of contributors is a list of the peerage of the world's internists; and its contents embrace about all that is current in the accepted theories and practice of modern medicine.

The volume is divided into two parts. Part One is devoted to Diseases of the Nervous System, and is subdivided into 23 chapters, embracing a copious and exhaustive introduction by Lewellis F. Parker of Johns Hopkins University. Diseases of the Motor Tract, by William G. Spiller, M. D., comprises several chapters on the Combined System Diseases of the Spinal Cord, Sclerosis of the Brain, Diseases of the Meninges, Diffuse and Focal Diseases of the Spinal Cord, Topical Diagnosis of Disease of the Brain, Aphasia, Tumors of the Brain and Meninges, Hydrocephalus, Acute Encephalitis and Brain Abscess, Diseases of the Cerebral Blood Vessels, Diseases of the Cerebral Nerves, Diseases of the Peripheral Nerves, Epilepsy, Neurasthenia, the Traumatic Neuroses and Psychoses, Hysteria, Migraines, Neuralgia, Professional Spasms, Occupation Neuroses, Tetany, Paralysis Agitans, Chorea, Choreaform Convulsions, Infantile Convulsions, Myasthenia Gravis, Paramyoclonus Multiplex, Periodic Paralysis, Astasia-Abasia, Adiposis, Dolorosa, Syphilitic Disease of the Central Nervous System, Amaurotic Family Idiocy.

Part Two contains discussions of Diseases of the Locomotor System; Myositis, Myotonia Congenita, Thomsens Disease, Arthritis Deformans, Achondroplasia, Hypertrophic Pulmonary Osteo-Arthropathy, Paget's Disease, Osteogenesis Imperfecta, Osteopsathyrosis, Leontiasis Ossea, Microcephalus, Facial Hemiatrophy.

It is unnecessary to say that this book is one of the most valuable contributions to modern medical literature. Its corps of writers are among the ablest of all the medical scientists, and every line seems to have been written with scrupulous care for the interests of the patient and the physician to whom shall be entrusted the conduct and treatment of each case.

The physical make up of the book is what is to be expected of its publishers; well done throughout. And subscribers will not be disappointed in either the contents or the container.

A Text-Book of the Practice of Medicine. For Students and Practitioners. By Hobart Amory Hare, B. Sc., M. D., Professor of Therapeutics, Materia Medica and Diagnosis in Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital, Etc., Etc. 3rd Edition. Revised and enlarged. Illustrated. 142 plates; 16 colored plates. Octavo, cloth, 969 pages, 10 point, leaded. Lea & Febiger, Philadelphia and New York, 1915.

This edition shows an enormous amount of hard work in its revision and enlargement. It does honor to its author and publishers. The text discusses Disease Due to Specific Infection, Diseases of the Respiratory System, Diseases of the Circulatory System, Diseases of the Digestive Tract, Diseases of the Peritoneum, Diseases of the Liver, Diseases of the Biliary Tract, Diseases of the Pancreas, Diseases of the Kidney, Diseases of the Ductless Glands and the Lymphatic System, Diseases of the Blood, Diseases of Nutrition and Intoxications.

Under Diseases of the Nervous System Dr. Hare, in a lucid style, takes up the consideration of the diseases in which the chief manifestations are in the brain and it membranes, diseases in which the chief manifestations are in the spinal cord, diseases in which the chief manifestations are in the nerves, diseases in which the chief manifestations are in the muscles, fuctional nervous diseases and diseases of disputed pathology.

The book is well built, strong, and handsome. The type is large and clear, and printed on good paper. The text is a great acquisition to the later clinical literature. Physicians will find it abundantly worth both their money and their careful reading. It is a good book to place on the table for ready reference.

A Manual of the Practice of Medicine. By A. A. Stevens, A. M., M. D., Professor of Therapeutics and Clinical Medicine in the Woman's Medical College of Pennsylvania, Lecturer on Medicine in the University of Pennsylvania. Tenth Edition. Revised. 12mo. of 629 pages, illustrated. Philadelphia and London. W. B. Saunders Company, 1915. Flexible Leather, $2.50 net.

This is one of the older of the modern medical works, having been copyrighted in 1892. It has passed through the great changes in the theory and practice of medicine, but the present edition shows no marks of antiquity, coming from the hands of both its author and its publishers in youthful, sprightly, up-to-date freshness.

The publishers have always shown a peculiar pride in this little manual. They have sent it out in attractive, full morocco, limp binding. The text is classic in style, the thought vigorous and the meaning clear. The subscriber will doubtless fully justify the author and publisher in producing this work for the tenth time.

Prof. Stevens was born in 1865; graduated in 1886, at 21, and issued the first edition of his book in 1892, in his 27th year. The book has lived 23 years, and is still new, while its author is only 50 years of age. May they both be fresh and youthful to the end and "When fancy, halts weary in her flight, in other men, may his fresh as morning rise."

A Manual of Diseases of Infants and Children. By John Ruhrah, M. D., Professor of Diseases of Children. College of Physicians and Surgeons, Baltimore, Md. Fourth Edition. Thoroughly Revised. 12mo. volume of 552 pages, 175 illustrations. Philadelphia and London. W. B. Saunders Company, 1915. Cloth, $2.50 net.

This fourth edition of Professor Ruhrah's book will be welcomed by every physician who is at all loyal to his little patients. The author is one of our most aggressive medical scientists, and he never tires in his efforts to know and to do what is best for the sick, and for those who have to attend the sick; this many a grateful practician will gladly affirm.

The book is tastefully made, of good material, well printed in 10 point type, leaded, on excellent paper and is richly worth the cost plus the attention of the subscriber.

The Principles of Bacteriology. A Practical Manual for Students and Physicians. By A. C. Abbott, M. D., Professor of Hygiene and Bacteriology and Director of the Laboratory of Hygiene, University of Pennsylvania. 12mo. 650 pages, with 113 illustrations, 28 in colors. Cloth, $2.75 net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

This is the ninth edition of Professor Abbott's book, which is a fact alone of sufficient weight, were it needed, to impress the subscriber with the value of its text; to say nothing of the further fact that so solid and well established a publishing house should continue to publish revisions of any book to the ninth edition.

The text is brief, clear and scientific. It is devoted to laboratory methods and technic. It eliminates mere theories and nonessential details, and renders the work of the laboratory as simple as possible, that it may the more readily be comprehended by those to whom the book is addressed—the student and the physician.

BOOKS RECEIVED.

Prevention and Treatment of Infections, *Osborne*. (A. M. A.)

Circulation in Health and Disease, *Wiggers*. (Lea & Febiger.)

Mother Craft, *Comstock*. (Hearst's International Library Co.)

Collected Papers of the Mayo Clinic, Vol. VI, 1914, (W. B. Saunders Co.)

X-Rays, *Mowat*, (Oxford Medical Pub.)

Treatment of Fractures, 8th Ed., *Scudder*. (W. B. Saunders Co.)

Diarrheal Inflammatory and Parasitic Intestinal Diseases, *Gant*. (W. B. Saunders Co.)

Progressive Medicine, June 1st, 1915.

Simplified Infant Feeding, *Dennett*. (Lippincott.)

Applied Immunology, *Thomas-Ivy*. (Lippincott.)

Operative Gynecology, *Crossen*. (C. V. Mosby Co.)

Exercise in Education and Medicine, *McKenzie*. (W. B. Saunders Co.)

A Manual of the Practice of Medicine, *Stevens*. (W. B. Saunders Co.)

Practical Medicine Series:

Gynecology, Vol. IV., *Dudley-Stowe*, 1915.

Cancer, Its Study and Prevention, *Taylor*. (Lea & Febiger.)

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

THE STUDY OF VENEREAL DISEASES.

Of the several venereal diseases, only two are referred to when the subject is under general discussion, namely, syphilis and gonorrhea. Probably no two diseases have in the history of the world received more consideration at the hands of both the laity and the medical profession. Syphilis is probably the first disease to receive successful specific treatment. Beyond that, there has been little advance made in its study until very recent times. The startling discoveries in this particular field and its development during the past few years, is wont to create the impression among us that there is now little more to be learned; that the diagnosis and treatment of syphilis amounts to the merest routine. Such is not the case by any means. The discovery of the Wassermann reaction, and its successful application to many heretofore obscure and serious diseases, and salvarsan, with its wonderful specific effect, has led us up the mountain side of optimism, from which we have expected to look into the promised land of freedom from this particular plague. There is, fortunately, no pessimism as a result of our failure to realize to the fullest extent our fond expectations. We have simply realized anew what we have all along known, that in the practice of medicine there are exceptions to all rules, and that no part of it can become fixed as a science. While the Wassermann reaction has led us unerringly to the cause of many obscure and baffling conditions, resulting in many instances in a cure where no cure had been thought possible, we have long since realized that where the test is at variance with the clinical evidence of a case, the question of diagnosis is still open to debate. It is the custom at the present time among the more advanced diagnosticians, when such a condition as this arises, to refer the matter to several different serologists for independent tests, and perhaps the clinical evidence to other diagnosticians.

Our special study of syphilis of the nervous system has recently led us quite rapidly into new and promising fields. Our efforts to reach the cerebro-spinal system with the specific drug, has led to the development of the intraspinous salvarsanized serum treatment, concerning the success of which opinion continues to differ; and the colloidal gold reaction of Lange is the result of our efforts to better diagnose the disease in these parts. The opinion is gradually becoming prevalent that involvement of the brain and spinal cord is not so much a result of continued, untreated infection, as it is that there is either a certain degree of selectivity, or the cerebro spinal system is involved from the beginning and suffers to a certain extent all along. It is really here that the colloidal gold test and the intraspinous use of salvarsanized serum is useful. While observers differ as to the specific effect of salvarsan, or neosalvarsan, in general paresis and tabes, there is little difference as to the prophylactic effect of the treatment. Medical literature is full of the subject, and it is this phase of the situation that is deserving of special study from a medical standpoint. It has long since been conceded that salvarsan, or neosalvarsan, is not sufficient as a cure for syphilis, and that these remedies are chiefly useful in removing symptoms and relieving the patient of the immediate effects of the disease. Mercury and time are still required for the perfection of the cure, and the

Wassermann reaction is almost a perpetual necessity.

The subject of gonorrhea seems not to have attracted so much attention, except from its sociologic aspect. The part played by this disease in the production of blindness and in abdominal surgery, has been dealt with quite extensively, and here and there current literature produces something helpful in the matter of treatment of the disease itself. Quite recently a writer recommended a treatment in which, through a special device, the temperature of the infected tissue could be raised sufficiently high to kill the gonococcus without injury to the tissue itself, which seems not to have been used extensively, and many new devices for facilitating treatment by irrigation have been described; but on the whole, gonorrhea has hardly received the attention its importance demands—except that, from the standpoint of social hygiene, perhaps it is better understood today than ever before, that a bad cold is much to be preferred to gonorrhea, and that the druggist is not the safest practitioner of this particular specialty.

As to the present prevalence of venereal diseases, with particular reference to our own State, perhaps a quotation from the report of our Committee on the Study of Venereal Diseases, found on another page of this number of the JOURNAL, will suffice. After stating that the diseases under discussion are neither greater nor lesser in this State than elsewhere, and that they are on the increase, probably because of overcrowding in our larger cities, the committee continues as follows:

"That one-tenth of our population is syphilitic, either actively or possessing an hereditary taint; that 80 per cent of the operations done on the pelvic organs of women are the result of gonorrheal infection; that the vast majority of inmates of our asylums for the blind are there as a consequence of an ophthalmia, contracted at birth; that 90 per cent of childless marriages are due to a previously existing gonorrhea in either husband or wife, and that 85 per cent of all men 35 years of age have had at least one attack of gonorrhea, are facts borne out by statistics compiled by careful observers."

Discussing ways and means for securing relief, the committee has the following to say:

"Among those measures chiefly advocated are, compulsory reporting of all cases of venereal diseases; medical inspection of houses of prostitution; teaching sex hygiene in the public schools; compulsory medical examination of both parties as a preliminary requirement for marriage, and a campaign of general education for the public at large, in order to acquaint them with the prevalence and danger of venereal diseases."

We join the committee in pronouncing all of these measures, except the last one, thoroughly impractical at the present time. Should we require venereal diseases to be reported and made a record of, very few cases would receive treatment at the hands of reputable physicians. The public is not yet ready to accept the plan of teaching sex hygiene in public schools, because of the manifest delicacy of the subject and the dearth of teachers capable of presenting it in the right light to school children, many of whom are just reaching the age of puberty. Neither is the public ready to accept the plan of compulsory medical examination as a requirement for marriage, and any efforts in that direction will at the present time be necessarily impractical. However, there is no reason why the public should not be educated on the importance of a thorough knowledge of these diseases, both as to prophylaxis and cure, and our efforts may be well expended in that direction. Medical inspection of houses of prostitution may not consistently be required, as long as such houses are not allowed by law to exist.

There are many societies organized for the purpose of spreading information as to the baneful effects of venereal diseases, and they are doing a great work. Perhaps there should be a greater proportion of physicians among the membership of these societies, and particularly among the leaders. Physicians are perhaps no wiser that the social workers, and certainly they do not know the social aspects of the question as do those who have made this work a specialty, but their knowledge of the far-reaching physical, mental and moral aspects of the subject, is superior to that of any layman, and there would seem to be no reason why the purely social side of the situation might not be easily mastered with a little close application to the literature on the subject.

MEDICAL EDUCATION.

Probably the most potent factor in correcting the many ills of the medical profession, and consequent abuse in a medical way of the defenseless lay public, is the reform in medical education recently undertaken, and now fast ap-

proaching successful culmination. It is now quite apparent that inefficiency and ignorance in our own ranks, account for the lack of respect by the laity for the medical profession, and it is no less apparent that sectarianism and quackery has come from the same source. It was not, however, so apparent in the beginning, and those who pioneered this movement are entitled to great credit, no less than those who have endured the criticism originating and having its source in the disgruntled and disappointed proprietors of low grade medical colleges, the fundamental cause of it all. In many instances these influences have been far reaching, and but for the patient and steadiness under fire of those responsible for the movement, failure would perhaps have resulted. Serenity has doubtless come of a prophetic spirit and a thorough knowledge of human nature. It was, of course, to be expected that those who have profited, either financially or in the matter of influence, from low grade medical colleges and diploma mills, would keenly resent any effort to curtail this traffic in medical education, and their influence was doubtless not underestimated. However, the rank and file of the profession may be depended upon ultimately to rally to the support of all righteous principles, no matter what the efforts to divert may be, and the now practically assured success of the movement is the ample reward of those who have fought the fight; and it is the chief glory of the medical profession.

Fifteen years ago, *The Journal of the American Medical Association* began the collection of statistics regarding medical colleges, students and graduates in the United States, and from this effort has arisen the great movement subsequently set on foot by the newly created Council on Medical Education. There were at the time 159 medical colleges in the United States, 22 of which were homeopathic and 10 eclectic. There were 26,417 medical students, and 5,444 were graduated in the year 1901. Most of the medical colleges at that time made little effort to ascertain the desirability, from an educational standpoint, of those seeking to master the profession of medicine, the result being, even in the better class of colleges, that many "compend" students were granted diplomas. Some of the schools made practically no pretense at assuring themselves of the competency of their graduates, the main effort being to fit them to pass the low standards of most of the State requirements for license. Since 1904, 92 medical colleges have ceased to exist, 52 by merger and 40 by retirement from the field. Of these, 48 were rated by the Council on Medical Education as either class A or class B, and 44 as class C. 95.5 per cent of those rated as class A and class B, and 20 per cent of class C, were merged with other colleges. All but five of those which became extinct were rated by the Council on Medical Education as class C. Of the 95 existing medical colleges, 83 now require one or more years of college work for admission, and others will soon adopt at least this requirement; 39 of these require for admission two or more years of college work. Corresponding with the elevation of medical college standards, State licensing boards have adopted higher requirements, and today 28 State licensing boards have established the requirement for preliminary education of one or two years premedical collegiate preparation.

The total number of medical students in the United States during the past year was 14,891, a decrease of 47.1 per cent below 1904, when 28,142 students were registered. Of the total number of students last year, 13,914 were in attendance at the non-sectarian colleges, 736 at the homeopathic and 241 at the eclectic. The total number of graduates for this year was 3,536, a decrease of 58 below 1914, and 2,211 (38.8 per cent) below 1904. Of these, 3,286 were from non-sectarian colleges, 195 from homeopathic and 55 from eclectic colleges. These figures are from the educational number of *The Journal of the American Medical Association,* August 21st, 1915. It seems that no account is taken here of the osteopathic colleges and graduates. This data, and other data of equal interest and importance, contained in this number of *The Journal* emphasizes the importance of the movement for fewer and better medical colleges, and fewer and better trained physicians, and should engage the close attention of the medical profession of this country as a whole.

Reform in medical education has not been accomplished in a day, neither has it been ruthless and unreasonable, as reforms are wont to be. It will be observed that a period of fifteen

years has been covered, and it is a fact that a great deal of money has been expended in financing personal inspections and in gathering data. The American Medical Association has not been alone in this crusade. It has been joined by several other organizations interested in the same problem, foremost of which are the Carnegie Foundation and the American Association of Medical Colleges. The report of the first investigation made by the Carnegie Foundation was perhaps one of the most startling affairs of the kind ever known in educational circles. Most of our readers will well remember the discussion that followed. Our comment at the time was, that while mistakes were perhaps made, on the whole the effect would be wholesome. We see this prediction realized.

Perhaps the most helpful feature of the movement was the definite rating given to medical colleges by the Council on Medical Education. State licensing boards had something definite before them, and prospective medical students could judge somewhat of the quality of the several institutions to which they might have access. Following many changes in the methods of classification, the Council has finally come to rest, and now classifies medical colleges as A, B and C, the first class comprising those institutions which are satisfactory in every respect, the second those which are not satisfactory in every respect but which may be rendered satisfactory by certain definite improvements, and those which are not at all satisfactory and which may not be made so except by total and complete reorganization. Of our Texas schools, the Medical Department of the State University is rated as class A, and the others as class B. It may be fair to state that the State Board of Medical Examiners rate all of the Texas schools as satisfactory.

THE NATIONAL BOARD OF MEDICAL EXAMINERS.

Lack of conformity in State laws plays havoc in the matter of medical licensure, no less than in other lines of endeavor. For some years there has been a distinct movement on foot to bring about a workable degree of uniformity between the States as to certain laws, and some progress has been made. However, the subject of medical licensure has been so complicated and the standards are so variable, that it is almost a hopeless task to secure anything like uniformity in this respect. Only a few of the States have single boards with single standards for all so-called schools of medicine, and many of the States have different boards for the different schools, with widely varying standards for each. It so happens that a physician seeking to remove from one State to another, and take up the practice of medicine in his new home, is compelled to undergo an examination for which he is at the time not fitted, although perhaps he is a high grade, successful practitioner and eminently fit from a practical standpoint. This is an injustice readily recognized, and the various State boards of medical examiners, and practically all of the State laws, have sought to correct the same by reciprocity provisions, wherein licenses may be exchanged under specific agreement. Such arrangements are good as far as they go, but there are too many variable elements to be considered to make the plan universally acceptable. The rules covering reciprocity and the law itself, not to mention the will of the several boards, are subject to alteration from time to time, which constitutes an element of uncertainty not altogether tolerable to national requirements.

In 1902 *The Journal of the American Medical Association* suggested that a sort of National Board of Medical Examiners be established, primarily for the purpose of testing applicants for appointment to the various medical services of the government, with the added suggestion that certificates from this board might be acceptable to State boards of medical examiners, because of the very practical and high grade examinations that could be given by such a board, and the further fact that the representatives of the Army, Navy and United States Public Health Service, holding membership on such a board, must be of high character and absolutely disinterested from the standpoint of locality. This project has been a hobby of President Rodman for many years, and a portion of his recent annual address on assuming the presidency of the American Medical Association at San Francisco, was devoted to this subject. After making a most excellent argument in favor of the establishment of such a board, Dr. Rodman made the following announcement, which is elucidative:

"The government, without any authority in the premises, has through the Secretaries of the Treasury, War and Navy, assented to the service upon such board of the Surgeon-General and an associate from each of these departments, and, in addition, has promised that the government laboratories, hospitals and schools for instruction may be used by the national board in conducting its examinations. The combined resources of these three government services are more than ample to meet every demand; moreover, they will insure an examination of such character as we believe to be necessary, yet is impractical where large numbers of applicants are examined in one building, within a prescribed time, and by only a few examiners.

"With the resources available to the board, a number of men can be examined in the several laboratories, some may be given a practical examination in the hospitals, while others undergo written, and still others take oral examinations, or operate on cadavers, all at the same time, but under different examiners."

Dr. Rodman gives the following account of the standards adopted by the National Board thus established:

"The National Board has adopted the standard of the Council on Medical Education of the American Medical Association, and in addition, will require at least one year of service in an acceptable hospital. These requirements will be rigidly enforced; that is, an applicant must give satisfactory evidence of having had the following:

"(a) A diploma from a high school of good standing giving a four year course.

"(b) A satisfactory course in science, embracing physics, chemistry, biology, of not less than one year.

"(c) Four years in a medical school of A grade.

"(d) At least one year as interne in an acceptable hospital.

"The hospital year is required for two reasons. First, no one should practice medicine independently, however well taught theoretically, until he has had practical training under experienced men, and this can be secured only in a hospital. Some colleges require it before graduation, and some States demand it before licensure."

The personnel of this board is of the highest. The several medical services of the government are represented by their respective surgeon-generals, and other representatives, and each section of the country, and other organizations concerned with medical education, are also represented. The first examination will be held in October of this year. The amount of the fee required has not yet been announced, so far as we are aware.

This board will in no sense interfere with the prerogatives or duties of State Boards, and it is not intended that it shall. Doubtless a majority of State boards will recognize certificates issued by the National Board, and will issue licenses based upon the same, much as now is the case in the matter of reciprocity between the States. This will be a distinct advantage, and so far as we can see, the most rabid State rights advocate can have no objection to this procedure.

Efforts have heretofore been made to secure the enactment into law of bills introduced in Congress, providing for a national board of medical examiners, but the subject seems not to have appeared feasible even to the medical profession. Of course, our adversaries, the so-called National League for Medical Freedom, and others, have found delightful occasion for blackguard in discovering such bills, and pointing to them as further evidences of the criminal intentions of the medical profession of this country, all of which has been of little concern to the said medical profession, so far as we are able to observe. As an evidence of such freak opinions, we beg to quote the following paragraph from *The Journal of the N. A. R. D.*, the official organ of the National Association of Retail Druggists, an organization supposed to be friendly to the medical profession. It will be noted that this association is well named referring more to the commercial than to the pharmaceutical. The item referred to follows:

"If the political doctors could succeed in putting this bill through, they would accomplish what they are attempting with the Owen Bill. This bill is so frank and open in its object that it is possible the medical gang have brought it out for the purpose of attracting the fire of the medical freedom element and diverting it from their serious measure, the Owen Bill, the passage of which is their hearts' greatest desire.

"This strategic move may fool B. O. Flowers, Jos. C. Mason and their bunch, but the N. A. R. D. and the pharmacy element will keep a sharp watch for both bills. The N. A. R. D. wants the doctors to have all that is coming to them, but no more—no power to oppress pharmacy and pharmacists. Get the idea?"

There is, of course, no constitutional reason why a federal law covering this subject might not be passed, but so far as we know, organized medicine has never made the effort. It is a matter of policy with the federal government

not to enact laws that can be covered by State legislation, particularly in which there is a strong sentiment in favor of State control. The medical profession has suffered long enough by such restrictions, and has long sought to overcome them.

It is hoped that the federal board, above referred to, will meet the approval of the State boards of the country, and that many of our future graduates will see fit to take the examination. While a certificate from this board will probably never be required, its possession will be a matter of satisfaction and an advantage to any physician.

THE TEXAS STATE BOARD OF MEDICAL EXAMINERS.

Texas has a splendid medical practice law. It could be materially strengthened by proper amendment, but the danger of picking up hurtful amendments in the process has appeared heretofore so great that the effort has been deemed inexpedient. The State constitution requires that in the formation of laws governing the practice of medicine, no "school of medicine," shall be discriminated against. In order that there might be no question and no court procedure along that line, Mr. Looney, the present Attorney General, the author of the law, thought best to require that in the formation of the board of examiners, no "school of medicine" shall have a majority of the entire board. It will be recognized that this provision is really a discrimination against the regular medical profession, in that the combined minor schools really constitute a very small proportion of the physicians in the State. However, those concerned in the making of this law considered primarily the fact that a great majority of the medical profession, regardless of school or practice, are fundamentally honest and honorable, and that a majority of almost any board formed after the provision of the law, might be safely depended upon to do the right thing. Hence it is, that we have no special board for special practitioners, and only the one standard for all who would undertake to practice medicine in this State. An examination is required on the fundamentals only. It was deemed sufficient that a physician know anatomy, physiology, chemistry, histology, pathology, bacteriology, physical diagnosis, surgery, gynecology, hygiene and medical diagnosis, and that is what he will have to know, The law could not undertake to govern him in the matter of practice, or the way he should proceed to work a cure. There are, of course, certain fundamental principles relating to the art of the practice of medicine which we would like for our licentiates to know, but they are secondary in importance and we find it impossible to agree among ourselves, that is, the medical profession as a whole, as to what they are. The law makes certain requirements as to eligibility for examination, which are thoroughly protective, and the board is given rather a wide range of discrimination which may be taken advantage of to materially strengthen this provision. The definition of the practice of medicine, as given in this law, is particularly good, and has stood the test of the courts. In this State, any one who would treat any disease or disorder, mental or physical, or any physical deformity or injury, by any system or method whatsoever, must stand a satisfactory examination before this board, and there is no middle ground. We have no need of a law to care for the various "cults." All the cults have to do is to take the examination provided for by our medical practice act, and they may suit themselves as to their subsequent system of practice.

On the whole, it seems that our board has done very well. There has certainly been no serious disagreement between the several "schools" represented. Neither has there been any misunderstanding or lack of harmony between the board and the several state organizations of the schools represented by the board. The efficiency of the board has never been seriously questioned, and its honesty of purpose has always been clearly evident. Any lack of efficiency has been incident to its political origin and to the fact that no physician connected with any of the medical colleges in the State is eligible to serve on the board. It should not be expected, even of the most successful practicing physician, that he shall know off hand the best method of conducting such an examination as will determine the qualifications of an applicant for license to practice medicine. Some physicians are more apt than others, and require less time to develop the necessary qualifications. It is really surprising that the board should have proven so uniform-

ly satisfactory, and we are pleased to acknowledge the obligation of the profession and the public to those who have to-date served so well as members thereof.

In this number of the JOURNAL will be found the results of the June examination, which have only recently been announced, together with the questions propounded. There will also be found certain matter relating to the personnel of the Board, which we trust will be of interest to our readers. There were 140 candidates for license by examination, and of these all were successful except four. Besides these, 7 were licensed by verification and 33 by reciprocity. A few minutes spent in analyzing the results of the examination will prove of some interest, particularly at the present time, when the subject of medical education is so prominently before us. For instance, of the four who failed to pass the examination, two were osteopaths, from the American School of Osteopathy, one was from the University of Tennessee, and one from the Chicago College of Physicians and Surgeons. Leaving these four out of consideration, we find that the Southern Methodist University led our State schools in general average, with a percentage of 87.8. The Medical Department of the State University followed with 87.6, Baylor with 85.8, and T. C. U. with 85. The general average of the schools outside of the State, not including the osteopaths, graduates of Meharry Medical College and a homeopath, was 84.2. The average of the osteopaths was 82.2. The one homeopath we are able to indentify, received a grade of 87, and the Meharry graduates, from which we infer the standing of the negro applicants, averaged 83.4 The general average was 85.3. Looking at the matter another way, we find that the general average was exceeded by 75 per cent of the University of Texas graduates, 60 per cent of the osteopaths, 60 per cent of those from the Southern Methodist University, 57 per cent of the Meharry graduates, 56 per cent of the out of State graduates, 46 per cent of the Baylor and 45 per cent of the T. C. U. representatives. A grade of 90 per cent or better, was attained by 27 per cent of the University of Texas representatives; Southern Methodists, 40 per cent; Baylor, 20 per cent; osteopaths 13 per cent; T C. U. and out-of-state schools 9 per cent. These figures are approximate, and may or may not be of importance. It must be admitted that the character of examination given is hardly a fair test of the ability of a physician, particularly as to the scope of his knowledge, and it is really this that determines the value of the instruction given by a medical college. The only fair examination would be one in which bedside and laboratory examinations are conducted, and such is clearly out of the question for a state board. And while we may criticise the examination given by the average state board, we are slow to attempt to advance anything like a feasible plan for betterment. Perhaps the National Board of Examiners is the real solution of the problem.

The most excellent grades made by this particular class, and the small percentage of failures, is a matter worthy of comment. A prominent member of the board, discussing this point, said that it was clear that either the questions were too easy, the grading too light or else the character of instruction given during the past three or four years has very much improved over that of previous years. He was inclined to believe that a combination of all of these circumstances served to account for the peculiar situation. We are inclined to agree with this view of the subject, and are particularly pleased to assume that our medical colleges are doing better work than heretofore. We can know nothing of the standards adopted by the several members of the board in grading papers, but the questions show for themselves. On the whole, these questions appear to be about as usual, some of them being of particular value in the way of drawing out the applicant and determining the scope and extent of his knowledge, while others would appear to be mainly a test of memory. We are sure any member of the Board will be glad to discuss its work with those of us who have the matter at heart, and we feel that the entire medical profession is interested in the subject.

There is one other point of interest. Last June there were 8 osteopathic applicants for license, with one failure. This year there were 17 applicants and 2 failures. Can it be that the unusual rights enjoyed by osteopathic physicians in Texas, particularly under the Harrison Narcotic Law, have anything to do with the situation? This issue has become rather sharp in states that have special osteopathic boards, in which the right to prescribe medicine is restricted. So far as state laws are concerned, such restrictions are not usually considered of very great importance. It is another matter when it comes to violating a federal law.

ORIGINAL ARTICLES

THE GEOGRAPHIC DISTRIBUTION OF PLAGUE AND ITS MENACE TO THE UNITED STATES.*

BY

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Assistant Surgeon General, United States Public Health Service.

WASHINGTON, D. C.

Bubonic plague follows the main traveled roads, spreading out along the less beaten paths to the remote ends of the earth. Fortunately, its spread from one country to another occurs more frequently by water than by land.

The United States Hydrographic Office issues a large map called "Tracks for Full Powered Steam Vessels." It is a Mercator's projection of the world. If such a map be laid out on a flat surface and pins are inserted to mark the places in which bubonic plague prevails at the present time, not only will the geographic distribution of the disease be pictorially represented, but the fact of its spread along the routes of commerce will be shown as well. It will be noted in the first place that the continents are almost encircled by the pins which mark the places where plague exists, and at those points where the lines of travel converge, such as the Hawaiian Islands and Mauritius, the disease is almost sure to exist.

Rodent and human plague were found in the Hawaiian Islands no longer ago than August last. Taking the Hawaiian Islands as a central point, plague is found to exist in Seattle, 2,409 miles away; California, 2,091 miles distant; in Yokohoma, 3,445 miles away; in Hongkong, 4,857 miles away, and in Shanghai, a little over 5,000 miles distant. It is thus easily seen how our entire Pacific Coast is threatened by plague from the Orient, with the Hawaiian Islands as the point at which the lines of travel converge and from which the disease routes spread out to our western ports.

The Pacific Coast is also menaced by the existence of the disease in Ecuador and Peru, on the western coast of South America, a little over four thousand miles away from San Francisco.

The entire Gulf Coast of our country is menaced by plague in Habana, 769 miles from Galveston, 601 miles from New Orleans, 324 miles from Tampa, and 92 miles from Key West. The disease was found among rats in New Orleans no longer ago than March 9, 1915. On account of the unsettled conditions now existing in Mexico, it is impossible to know whether or not plague exists in her Gulf ports.

The Atlantic Coast of the United States is threatened with the importation of plague not only from the eastern coast of South America, but from European, African and Asiatic ports as well. Less than five thousand miles from New York, plague is found in Brazil, at Pernambuco, Bahia and Rio de Janiero. In the Mediterranean littoral, plague is found in Tripoli, Greece, Egypt and at Port Said, one of the great gateways of the world. Practically all of the great ports of British India, with the exception of Calcutta, are infected with plague. Rangoon, Madras, Colombo, Bombay and Karachi report the presence of the disease, and from the latter point it has extended up into the Persian Gulf. Singapore, Surabaya, Mauritius, Zanzibar, Queenstown in South Africa and Dakar in Senegal, all have plague. Directly or indirectly our country is in commercial communication with all of the infected places which have been mentioned, and it must be admitted that in view of the fact that plague is a disease of rodents which travel around the world in ships, the United States must consider itself as seriously menaced by bubonic plague.

Under normal conditions plague is an epizootic disease of rodents. Occasionally, as favorable conditions arise, it becomes an epidemic disease. Among rodents it may be either acute or chronic. The former condition produces a rapid local spread of the epizootic. The latter condition perpetuates it locally and permits its distribution to distant ports. Since the disease is capable of such perpetuation and since it is found in almost all of the great ports of the world, there is no reason to believe that it does not exist in the remaining ports, and that our lack of knowledge as to its existence in those ports from which it has not been reported, means that the search for the disease has either been neglected or has been made half-heartedly. This applies to the United States as well as to other countries. Careful rodent surveys have been conducted in only three of the ports of this country and in all three of these the disease has been found to exist. It is not at all unlikely that a thorough search would demonstrate the presence of the disease in the other American seaports having a large foreign commerce.

The experience at New Orleans is an ample demonstration of this assertion. Several thousand rats were examined before a single one was found which was plague infected, and this one would in all probability have been entirely overlooked had it not been for the large experience of the examiners. The examination of rats is a matter requiring considerable skill and much experience, and whenever there is a plague outbreak as many sani-

*Read by invitation before the Section on State Medicine and Public Hygiene, State Medical Association of Texas, Fort Worth, May 4, 1915.

tary officers as possible should visit the scene and thoroughly familiarize themselves with the methods to be used in diagnosing, studying and combatting the disease. This was done at New Orleans, and representatives from many of the states found there an excellent opportunity to acquire knowledge of the disease at first hand.

Granted the existence of such a condition, what are the steps to be taken to combat it? The first line of defense is maritime quarantine. This may be so applied as to be exceedingly effective, but such efficiency is to be obtained only at the price of disastrous interference with commerce. The routine disinfection of ships, if done very thoroughly, will prevent the introduction of rats, and therefore the introduction of bubonic plague, but such a measure is of temporary value only, and if omitted a single time may be followed by the introduction of plague rats. In the case of vessels hailing from known plague ports, such fumigation should not be omitted, and in the protection of ports which have not been rat-proofed it is also necessary. To sum up, quarantine is absolutely effective only at the cost of commerce. It is at best a makeshift. Disinfection is expensive and not always certain.

The second line of defense is at the wharves, and consists in the prevention of the embarkation or disembarkation of rodents. This is accomplished by the use of metal rat guards on all mooring lines; by breasting the vessel off from the wharf by rafts or spars; by the guarding of gang planks, and by the inspection of the freight to determine its rat-proof, rat-free condition, prior to loading or unloading. The last is a valuable measure, but not one upon which absolute reliance can be placed.

The third line of defense may consist in the immunization of human beings against bubonic plague. This is at best a weak reed upon which to lean. In the absence of an epidemic, it is manifestly impossible in American cities to enforce Haffkinization. Under the most favorable conditions only a small portion of the community would consent to voluntary immunization, and of those who took the treatment only a small proportion would be among the stevedore and water-front class, the very people who are most liable to the disease at the beginning of the epidemic.

The fourth line of defense consists in rat-proofing the environment in which man works and lives. All of the other lines of defense or any combination of them may be used, but the single one upon which absolute reliance can be placed and from which lasting protection may be obtained is by the insulation of man from the animal which serves as the disseminating host of bubonic plague Any city which will render itself completely rat-proof need have no fear whatsoever of plague. The introduction of plague rats into such a place will be an occurrence of no account, because if rats, and therefore the insects which they harbor, are excluded from close contact with man it is a matter of entire indifference to him whether the rats have plague or not. It is not infrequently urged that rat-proofing is expensive. In the final analysis this is not true, and by reason of the more rapid and increased commercial communication which we have with all the rest of the world, rat-proofing has become as absolutely necessary as are good roads, sewers and public water supplies.

No modern city can afford to regard rat-proofing as a luxury. It is the duty of every municipality to incorporate in its public health and building codes ordinances requiring the rat-proofing of all structures within the limits of its jurisdicton. If the passage of such legislation is put off until an epidemic has appeared the work must be done under pressure. It is then relatively expensive. If the work is done gradually, particularly if it is done at the time the building is erected, the cost is comparatively trifling.

The only kind of rat-proofing which is really worth while is by the use of permanent impervious material such as brick, concrete or stone. This will fortify the ground areas against the entrance of the Norway rat. In the installation of such rat-proofing, great care is necessary that all accidental openings, such as are found around plumbing, electric wiring and the like, be closed effectively. All openings above the ground area should be closed with metal screening so that the climbing rats may not enter in this way. Those who live or work in rat-proof premises need have no fear of plague and the city which is rat-proof will not become the scene of an epidemic of the disease.

The eradication of plague from the City of New Orleans has already cost the Nation, the State, and the municipality upwards of $400,000, exclusive of the large sums of money which corporations and private individuals have laid out in rat-proofing. The $400,000 expended for epidemic measures would have gone a long way toward building permanent fortifications against rats. In addition, it should be pointed out that the business losses which the presence of an epidemic produces are so great as to be almost beyond computation.

So much has been written and said elsewhere regarding the methods to be used in plague eradication and prevention that it is needless to review that phase of the subject here. We know that plague is widely distributed over the inhabited portions of the globe. We know that our country is in constant communication with the various foci of the disease. We know that the most perfect quarantine system which it is capable for the

mind of man to devise cannot absolutely exclude the disease without serious impairment of commerce. We know that by the foresighted application of the simple principles which have been worked out by Surgeon General Rupert Blue and his co-workers, plague may be eradicated or prevented. The remedy, then, is simple. It lies in our power to say whether or not our country shall suffer sorrow and bereavement and financial losses by reason of our failure to make use of well proven measures. The day is fast approaching when the spread of this knowledge will have been such that public opinion will brand as ignorant or careless communities which fail to erect those barriers which will banish rodents from the home of man. In the older countries it is more difficult by reason of structural conditions to put plague preventive measures into operation, but in a new country like ours, which is still in the era of building, the erection and maintenance of non-rat-proof structures is inexcusable. Our duty as the wardens of the public health is to disseminate the information that plague is a wholly and entirely preventable disease, having no place in modern civilization and enlightened communities.

DISCUSSION.

Dr. W. B. Collins, Austin said: Dr. Rucker's paper is, indeed, a very comprehensive presentation of the subject, embracing the most efficient manner of preventing the spread of the disease. I am glad the paper has been discussed so ably, and endorsed so liberally.

Dr. A. L. Lincecum's paper on Disinfection; the main of which is that primary disinfection of the patient, surrounding quarters, and all attendants, thereby removing the necessity of secondary disinfections which are, in the light of modern research, of doubtful efficiency. And I am glad the consensus of opinion in the section endorses the contention of these papers.

The paper of Dr. W. A. Davis, on Vital Statistics, is also a very able one, and the doctor's aim is to stimulate more efficient system of birth and death records. He urges new and better laws, to be enacted, for the regulation of this much discussed branch of Public Health interest.

Dr. Oscar Dowling, New Orleans, Louisiana, said: It is a question of economics to rat-proof a community in the saving of life and prevention of sickness. In cleaning up and rat-proofing you get rid of harbors where rats live and breed. You cannot grow corn, peas, potatoes, etc., unless you plant the seed; so it may be said in the case of disease. No rats, no fleas; no fleas, no plague; no mosquitoes, no malaria. Clean up and prevent sickness.

It is difficult to procure appropriations for health work. The first survey in New Orleans was made in 1912, when approximately 15,000 rats were caught and examined. One infected rat was found. Not being able to secure additional funds the work was discontinued until 1914, when human plague appeared. Under the direction of the United States Public Health Service, the State and City boards co-operating, an extensive rat survey was carried on. Sanitary conditions have been very much improved. Clean towns mean better health; necessarily showing less sickness. It is a matter of practical economy to clean up and keep clean. Get rid of the rats and you have no plague.

Dr. W. M. Brumby of Waco, said: I thank Dr. Rucker for his able paper, and would like to emphasize the importance of prophylaxis being instituted right now, by the authorities in every seaport in this State—procrastination is dangerous. When State Health Officer, I called the attention of the mayor and the shipping interests in the chief port of our State, to the necessity of rat work being done because of the gradual approach of the plague to our coast. In fact, I predicted, in our *Health Bulletin* in 1909, that one or more of five gulf ports (Havana, Vera Cruz, Galveston, New Orleans and Mobile) would be infected within five years. The inevitable has happened and we are most fortunate that the infection did not creep into our portals, for we received no support from a city whose very existence depends upon its shipping interests. We did succeed that year in persuading one liberal hearted wholesale pharmaceutical house, to spend considerable time and money in an effort to exterminate rats with one of their products.

THE EPIDEMIOLOGY OF PELLAGRA.*

BY

K. H. BEALL, M. S., M. D.,

FORT WORTH, TEXAS.

The general features of the epidemiology of pellagra are well known, and I have thought it proper to limit my remarks to the epidemiological features of the disease in this state.

I wish first to direct your attention to this map of Texas, which I prepared three years ago. Upon it are a large number of small dots, each one representing a death from pellagra which has been reported to the state health department. Texas is big and has within her confines the greatest diversity of climate, soil and altitude, and it is interesting to investigate the extent of the disease in different regions. I shall, however, leave you to make your own inferences, taking your time for a very few remarks. At first glance there appears to be a pellagra belt through the Eastern central portion of the state, but this is the populous belt, and seven deaths in Jones county are according to the population, about eight times as many as the nineteen deaths in this, Tarrant county. This populous belt is the best watered part of the state, but I want to emphasize that, considering the population, it does not show the heaviest infection—perhaps I should say involvement—as, for instance, Jones county, referred to above. It is not a well watered county, but, comparatively, its mortality is very heavy. An interesting comparison may be made of El Paso and Navarro counties. The population

*Part of Report of Committee on the Study of Pellagra. Read before the General Meeting and Joint Session of all Scientific Sections, State Medical Association of Texas, Fort Worth, May 5, 1915.

*Submitted too late for publication in August, with the other two papers of the Committee Report. —Editor.

of El Paso is greater than that of Navarro, but there have been eight times as many deaths in Navarro as in El Paso. El Paso county has a river and many irrigation ditches, so that water, or the lack of it, cannot make the difference. There are several factors to be considered—the greater altitude of El Paso county, the greater urban population and the smaller number of negroes. Altitude is probably the most important factor—certainly pellagrins who go to Colorado improve practically without exception, if their nervous systems are not too badly damaged. The racial difference in the two counties is not important, for it has been definitely shown, unquestionably I think, that the negro shows a comparative immunity to pellagra, which fact is rather surprising considering their usual feebleness and the ease with which they fall prey to disease. In regard to the running streams and the buffalo gnat in pellagra, there have now been a number of cases reported from the arid part of Texas where there are no running streams; one in particular was that of a woman who died of pellagra and who, according to her physician, had not been in fifty miles of a running stream for eight years before she developed the symptoms.

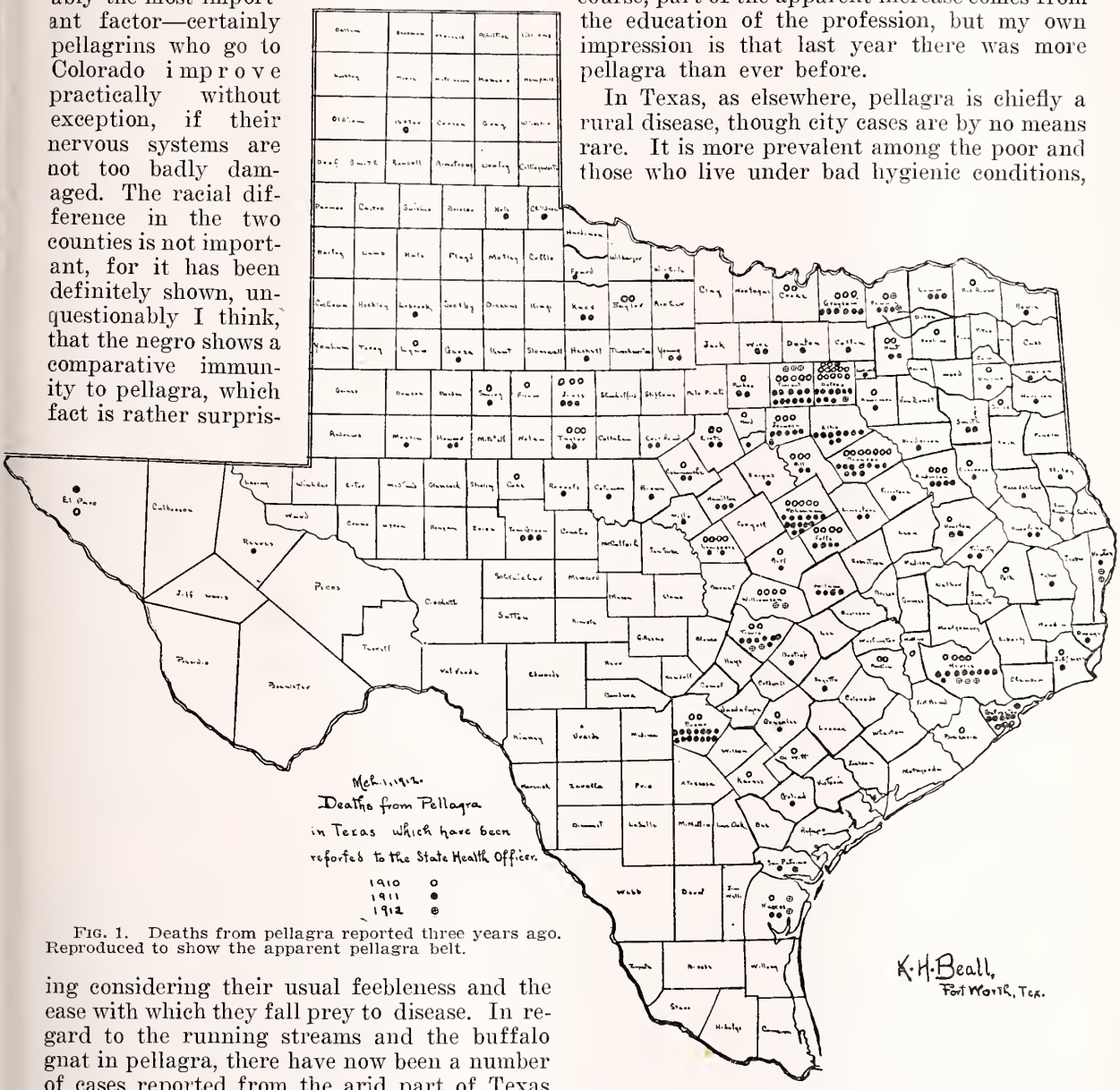

Fig. 1. Deaths from pellagra reported three years ago. Reproduced to show the apparent pellagra belt.

This chart (Fig. 2) shows the deaths from pellagra which have been reported to the health department of this State during the last five years. If we recall that the first Texas case was reported in 1907, the terrible ravages of seven years are evident. This chart shows well the usual summer increment, for while it is a mortality chart, it represents very well the morbidity also. As the chart shows, last year was a good year for pellagra, the number of deaths in one month alone being fifty-eight. Of course, part of the apparent increase comes from the education of the profession, but my own impression is that last year there was more pellagra than ever before.

In Texas, as elsewhere, pellagra is chiefly a rural disease, though city cases are by no means rare. It is more prevalent among the poor and those who live under bad hygienic conditions, but often does it attack the affluent and the refined. I have seen three cultured physicians, all in good financial circumstances, and five physicians' wives who were victims of this disease.

Upon this sheet (Fig. 3) I have charted according to sex and age, 1,769 deaths which have been reported to the health boards of

North Carolina, Alabama and Texas. In the first decade the incidence in the two sexes is the same. In the next decade, the female curve departs a little from the male curve, and in the third decade makes quite a departure, to rise still higher in the next and remain at quite a distance from the male curve in the next. If negroes are excluded from the statistics, the fifth decade is the one of greatest incidence for females. The male curve, having been rather constant until then, rises in the sixth decade, approaching the female curve, and meets it in the seventh decade. Is it not wonderful that in almost 2,000 deaths from pellagra there was in this decade a difference in the sex incidence of only four, and in the next decade absolutely no difference? This chart indicates that in Texas, females of a certain age are *more susceptible* to pellagra than are males, or when attacked, are *less resistant* to its ravages, or that they are *more exposed* to its causative agent. As to susceptibility, medical experience has not shown that females of twenty to fifty are more often attacked by any disease common to both sexes, except those due to disturbances of the thyroid gland. Shall we haul the thyroid into court to explain the greater incidence among females? I hesitate to exculpate this organ, for the nervousness, weakness, loss of weight, tachycardia, pigmentary changes, diarrhea and eye phenomena often seen in pellagra are suspicious symptoms, and I have seen several cases of hyperthyroidism in which the diagnosis of pellagra had been made. I am sure that an investigation of the autonomic nervous systems of pellagrins would be interesting. Another point, while we are regarding this chart, is that European writers upon this subject are unanimous in stating that the incidence is the same in the two sexes. There women share to a greater extent the labor of the fields, and to this dissimilarity of life, rather than to a comparative weakness of the American women (the only alternative), I must ascribe the great comparative difference in the incidence among women here and in Europe. In spite of Goldberger and others, it is very difficult for me to reconcile this peculiar sex difference with any theory based upon a faulty dietary, for women differ little from men in gustatory desires, and it is inconceivable that any food poisoning could affect the two sexes in America in such a dissimilar manner, and the women of America with such comparative greater frequency than the women of Europe.

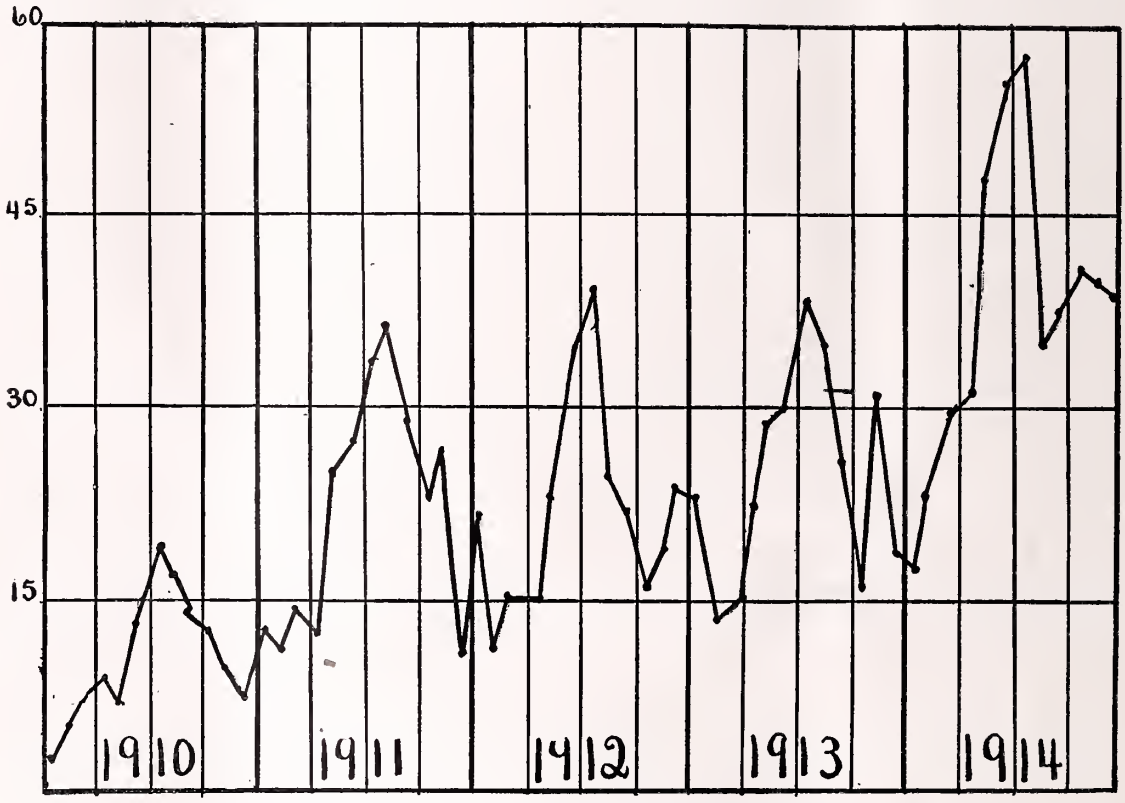

Fig. 2. Pellagra mortality in Texas for five years.

Medical history presents no more extended or bitter controversy than that which has been waged over the question of the cause of pellagra. Conjecture and not proof has been the prevailing spirit of this controversy, and in the search for the etiological factors epidemiological

features have, until now, been neglected. A study of the epidemiology of this disease would probably be most fruitful in its present period of invasion, before the salient features have become contorted by heredity, poverty and

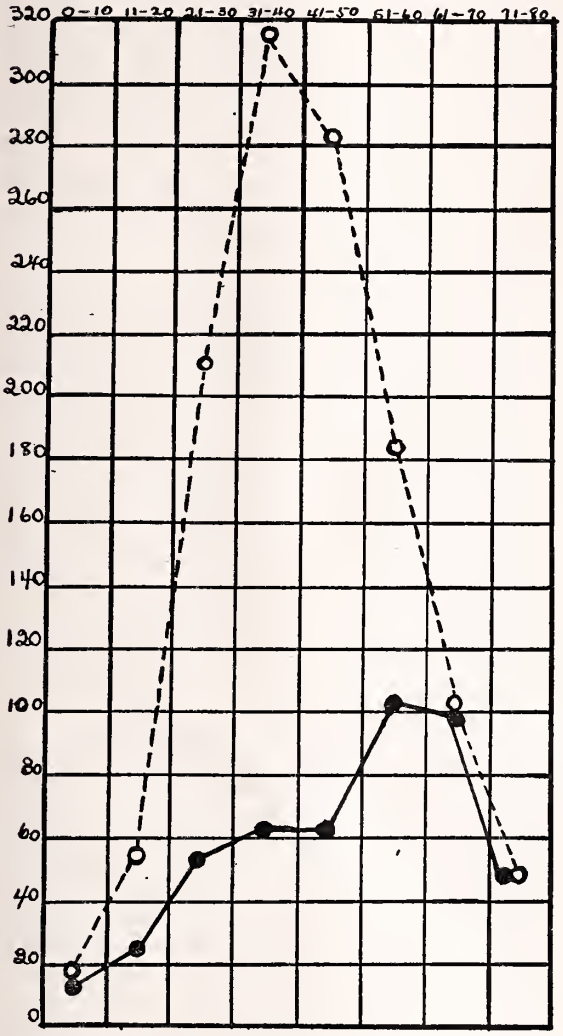

Fig. 3. If negroes are excluded the female curve does not leave the male curve until the third decade and reaches its highest point in the fifth instead of the fourth decade.

alcoholism, and any epidemiological peculiarity should be most carefully investigated, for a definite explanation of *any* peculiarity must include knowledge of the causative factor of this protean disease, in regard to the nature of which *there are at present no known scientific facts.*

Keller's Tuberculin Test Plate.—This appears to be an attempt to exploit the Moro tuberculin ointment. The test does not discriminate between active and latent tuberculosis. As most adult persons have experienced tuberculous infection at some time in life, a large majority of persons will respond positively to the test. (*Jour. A. M.* 1. December 19, 1914.)

BETTER HEALTH IN OUR PUBLIC SCHOOLS.*

BY

F. J. SLATAPER, M. D.,

HOUSTON, TEXAS.

The President of the United States, Mr. Woodrow Wilson, welcomed the Fourth International Congress on School Hygiene with these words:

"School Hygiene is one of the great problems of mankind. Mankind is a gregarious animal; we love association. Out of that disposition has grown our great communities, our immense cities, and in the early years of men the proper sanitation of cities was an immense problem for us to solve, and those who undertook the solution of it were looked upon as dreamers. Before they began their work it was nothing unusual for plague after plague to visit our cities and to wipe them almost entirely out of existence. Men began to realize that the coming together of men and women and children in large numbers brought problems relative to their health, their physical and mental welfare, that required the most careful study, the most energetic action to solve. To a very great extent we have solved the problem of sanitation in our cities. There is yet a great deal to be done in that direction, but the fundamental principles of sanitation are very generally known. Our school rooms, whether public or private, are little cities in themselves; they are cities composed of those who have not yet reached mature judgment, who have not yet had sufficient years in life to become familiar with the principles underlying proper hygiene."

Our biologists teach us that heredity and environment are the most important factors that influence the development of any animal. Many of our hereditary defects can be corrected, and every pupil can have a hygienic environment.

Better health in our schools can only be secured by the intelligent application of the principles of preventive medicine to all the conditions that influence school life.

The proper school grounds are as important to the health of a school as dry feet on a cold rainy day are to a school boy. The building should be inspected frequently. The heat, light, ventilation and proper seating of pupils are of first importance. The hygienic requirements for the construction of school buildings in Texas are by far too liberal and ineffective. It should be made unlawful to spend school funds to build a school house in or on a frog pond, notwithstanding the fact that the land may have been given as a free donation for school purposes. It should be equally unlawful to construct a public school house with a heating, lighting, ventilating or seating system, below that standard of sanitary requirements necessary to protect the health and comfort of all

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*Read before the Section on State Medicine and Public Hygiene, State Medical Association of Texas, Fort Worth, May 4, 1915.

the pupils. It is not intended that this paper shall demonstrate needed legislation. We hope to show how the school authorities, patrons and pupils themselves can improve their sanitary conditions.

Drinking cups and common towels in a school are more dangerous to public health than when found in a sleeping car.

The instruction that each child receives in personal hygiene will prove *pro bono publico.* The enforcement of a law regulating the sale of tobacco to children under the age of sixteen years, has its bearing in school hygiene. The silver nitrate treatment aids the will in the breaking of the cigarette habit in small boys. The Boy Scout Movement is doing much good by causing its members to "be prepared" on health subjects. There are many other points in personal hygiene that could well be discussed, but we must reserve the rest of this paper for a discussion of the inspection of the pupils themselves.

Physical defects are the diseases that interfere with the health of most children. It has been shown[1] that 67.9 per cent of school children have defective teeth; that 30.7 per cent have defective vision; that 29.4 per cent have nasal obstruction (including adenoids); that 24.7 per cent have diseased tonsils; that 16.4 per cent have some form of anaemia; that 8.9 per cent have orthopedic defects; that 4.4 per cent have malnutrition, and that 1.2 per cent have defective hearing. Most of these troubles can be corrected by proper treatment. Usually the parents are ignorant of the diseased condition. When the parents are advised of the true diseased conditions, and told of the consequences of not having the same corrected, the duty of the school physician has ended.

An important part of health work in schools is the detection of communicable diseases. Last year in Houston all of the public school children were examined for communicable eye diseases. The most valuable work for the conservation of the eye sight of the Houston children was the temporary exclusion of 32 cases of trachoma; 14 cases of active trachoma were found in seven homes. We excluded from three schools, whose enrollment was seventeen hundred and one pupils, eighteen children afflicted with this disease. Most of these have apparently been cured and the children are now in school. Many of these children were not aware of the fact that they had an eye disease, and only one knew that he had trachoma. I reported one family of nine people, all living in a three-room house, to the Harris County Medical Society, in which five showed symptoms of trachoma. The mother had opacities in each cornea; her husband had normal eyes; one son, attending public school, had trachoma; one boy not in school had normal eyes; one married daughter with trachoma; the son-in-law had no symptoms of the disease; two grand children had symptoms of trachoma, and one grand child appeared to have normal eyes.

"Carrier work" should be done in every case where a pupil is stricken with diphtheria. All of the suspected children in this school room, such as show nasal discharge, inflamed tonsils or cold, should be investigated with swab and culture. If more than one case should occur in this room, then swab every person. In one room we found five carriers from nine swabs; in another seven carriers were found in thirteen suspects. In these rooms no further cases of diphtheria developed.

The teachers were able to detect more cases of acute catarrhal conjunctivitis than were found in the regular personal inspection. We found that the teachers were able, after a little coaching, to easily recognize this condition. On a few occasions cases of supposed pink eye, when referred to my attention proved to be due to an error of refraction needing correction. In all cases medical attention was needed. This disease, simple though it be, is often the cause of many absences. If the first is allowed to stay in school or a case returned before the purulent discharge has stopped, an epidemic may get started that will prove a nuisance as to attendance. This seems to be its greatest capacity for causing trouble.

At the time the children were examined for trachoma, a superficial examination was made for the common communicable skin diseases. The following cases were temporarily excluded: Pediculosis, 12; scabes, 7; impetigo contagioso, 15; ringworm, 8. Many cases not mentioned, of pediculosis, impetigo and ringworm, remained in school when it was shown that the treatment rendered the disease non-communicable. Scabes and ringworm of the scalp are always excluded until cured.

The protection of the school from the more serious infectious diseases depends largely on the local health department. The health department in turn is dependent upon the manner in which the local physicians report diseases. Our quarantine officer, under Dr. Green's direction, when he tags a house gets the names and the school attended, of the pupil or school employees in that house who have been exposed. My department sees that these persons are kept out of school until the school requirements have been complied with. I mention this to show the close relation between the municipal health department and school hygiene. Much of the credit of my work is due to our health officer.

The teachers are a great factor in school hygiene. Last year many dangerous communicable diseases were first suspected by the teacher and referred to the principal. He either

called me over the telephone or sent the pupil to me with a note. I have been surprised at the skill the teachers show in these examinations. It is by such co-operation that the morbidity and mortality of measles and whooping-cough can most easily be lowered. The fact that a physician is often not consulted makes these diseases hard to locate. The public does not seem to realize the high mortality of these diseases in early childhood. Teachers report these two diseases far more frequently than do physicians. I am speaking from my personal experience in Texas.

No school can be protected against the dangers of communicable diseases of its children, without the enforcement of specific rules covering the time and manner of excluding pupils with these infections. These regulations should be well understood by the practicing physicians of the community. They will relieve the physician from answering many embarrassing questions.

The rules of the Houston School Board will illustrate my point. Copies will be promptly supplied upon application.

1. New York Bureau of Municipal Research, September, 1908.

TRACHOMA—WHAT IS IT THAT WE SHOULD BE MINDFUL OF IT?*

BY

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In view of the multitude of theories that from time immemorial have been advanced and followed to abandonment, with regard to the primary cause of this malady, I prefer to confine myself to a few of the most salient clinical features.

This disease was supposed to have been introduced into Europe by the soldiers of Napoleon's army, upon their return from Egypt, about the year 1802, and since that time has been recognized as Egyptian ophthalmia, one of the most prevalent forms of Egyptian sore eyes. In some countries, Russia and Poland for instance, something like 50 per cent of all cases of blindness are attributable to this disease alone.

The origin of the disease perhaps dates far back into antiquity. It is said to have been known in Japan as far back as 1200 years ago.

On account of the absence of absolute definite knowledge of its specific cause, we are obliged to depend almost entirely upon its clinical manifestations for diagnosis. No specific microorganism has been discovered that all investigators are willing to accept as its cause.

The manifestations of trachoma vary in different cases, and in the various stages of the same case; hence an absolute, rational classification of the disease is difficult. The manifestations most prominent are usually those due to inflammation of the conjunctiva, as shown by the hyperaemic condition of this membrane, with more or less secretion of a muco-purulent nature; upon everting the lids we find more or less characteristic granulations in various stages of development, covering and imbedded within the conjunctiva, presenting a more or less confluent appearance, depending upon the stage of the case and the gravity of infection. After some time has elapsed the first noticed, sharply outlined granular condition will be converted into an abnormal oedematous thickening of the entire conjunctiva.

The genuine trachoma granules are best seen in the early stages, when they present small, well defined, round, opaque, grayish granules, from one to two millimeters in diameter, rising above the level of the membrane. They may be limited to a small area of the conjunctiva, or may be quite numerous, occupying almost the entire conjunctiva, especially of the upper lids, and usually are most numerous in the retro-tarsal folds.

The differential points between trachoma and follicular conjunctivitis are at times difficult. However, we need not often fall into error in arriving at a fairly correct diagnosis, if we remember that trachoma is a disease peculiar not alone to children, but may be seen at all ages.

The following will show valuable differential points, as modified by Stephens:

(1) Follicular or false granulations are oval, transparent bodies, from 1 to 1½ millimeters in size, of faintly yellowish hue, arranged in parallel rows to the lid border, and are discrete and most often found in the folds of the lower lids.

Trachoma granules are opaque, ill defined bodies of grayish color, very friable and measuring from 1 to, in some cases, 2½mm. in size, with decided tendency to become confluent as the age of the infection advances and are more numerous in the upper retro-tarsal folds.

(2) There is little or no structural change in the conjunctiva in conjunctivitis of the follicular type.

Structural changes of more or less degree is the rule in trachoma.

(3) Papillary changes of hypertrophic nature are slight in the upper lids in conjunctivitis, while in true trachoma there will be marked changes in the upper conjunctiva.

(4) In follicular conjunctivitis, the tarsus is rarely or never implicated.

In trachoma the tarsus is often involved, more or less.

(5) The granules in follicular conjunctivitis disappear spontaneously, leaving no perceptible scar.

In trachoma, spontaneous cure may possibly occur, but only with cicatricial sequellae of more or less severity, depending upon the extent of the infection.

*Read before the Section on Ophthalmology, Otology, Rhinology and Laryngology, State Medical Association of Texas, Fort Worth, May 6, 1915.

(6) Follicular conjunctivitis causes no ptosis.
Trachoma invariably results in more or less ptosis.

(7) In follicular conjunctivitis no pannus results, while pannus is the rule in trachoma.

(8) In follicular conjunctivitis is no trichiasis, entropion, or cicatricial contraction of the *cul de sac.*
In trachoma one will frequently find as sequellae, trichiasis, entropion or shrinking of the *cul de sac.*

(9) Follicular conjunctivitis is most frequently seen in the young.
Trachoma may occur at any age.

(10) Follicular conjunctivitis is not contagious, while trachoma is conditionally contagious or infectious, and for that reason, where it is possible should be isolated.

Treatment varies according to the peculiar preference of the physician in charge of the cases. It may either be medicinal or operative. My individual preference is the operative, where it is possible to properly follow with the necessary after-treatment. By this method we shorten the time necessary to restore the conjunctiva to its normal health, and by so doing minimize the unfortunate sequellae, which are more to be dreaded in some cases than the primary condition.

Of the different surgical methods, I favor the radical expression, after thoroughly anaesthetizing the conjunctiva by cocain, either by external application of a 4 per cent solution, or the infiltration of the parts with 1 per cent solution, combined with adrenalin chloride. The lid is everted by catching it at its margin with forceps, designed for the purpose, and rolling it over the forceps in the manner one would a roller bandage around the finger, until the retro-tarsal folds are fully exposed; then scarify the entire conjunctiva from the retro-tarsal portion as the lid is unrolled from the forceps, until the margin is reached. This should be done gently, however, lest undue damage be done the lid proper. After being sure that the field has been thoroughly gone over, remove the forceps and evert the lid, so the expression forceps may be applied well up within the *cul de sac.* By gentle yet firm pressure, the entire field is cleared of granulation tissue; then strip the parts, as it were, with smooth forceps, until there can be no possible chance for any unobserved granules to escape removal. Then rub the entire field with an applicator covered with gauze saturated with a solution of bichloride or cyanide of mercury. Apply ice pads to the closed lids for from 12 to 24 hours, to prevent the swelling due to the traumatism. The subsequent treatment consists of daily cleansing with antiseptics, followed by rubbing well all the operated parts with a gauze applicator, well charged with boric acid, remembering to separate each time the remote folds of the retro-tarsal conjunctiva, in order that the discouraging adhesions may be prevented. Until restoration of the conjunctiva is accomplished, spreading within the conjunctival sack a 1 to 5000 bichloride of cyanide vaseline, will serve a good purpose as an antiseptic and lubricant.

The final results of this method of treatment depend to a considerable extent upon the intelligent care the patient receives after the primary surgical procedure is finished.

Cleanliness is paramount, and should be insisted upon for months and in some cases years to come.

The following data, gathered from the clinics of the New York Eye and Ear Infirmary, during 1911, 1912 and 1913, will prove interesting, I am sure:

During 1911 and 1912, there were treated in this institution 583 cases of trachoma, in the various stages of the disease. 94 cases were chronic and of this number 45 had well developed pannus as a complication.

Of the different methods of treatment used, scarification and expression leads the list with 227. During the following year, the number of cases recorded for treatment were 535, with only 3 acute cases. The complication of pannus, resulting from lack of proper, early attention, occurred in 84 cases.

Of the cases recorded this year, the favored treatment also was operative, by scarification and radical expression. The number of cases operated was 247. My personal experience in these clinics, at different times, has led me to a full realization of the vast number of cases of trachoma resulting from utter disregard of essential sanitary precautions, and to neglect of rational, early treatment. In my private practice, it is the exception to see a case of trachoma until chronicity is well established.

In conclusion, I do not consider that a permanent cure of these cases is often attained without the fullest co-operation of the patient in subsequent attention, for months and in some cases years, that undeveloped granules hidden within the deeper structures at the time of the primary operation be removed at the proper time. The soil in which the primary infection has developed, is more susceptible to recurrence than it was to primary invasion.

The most rational treatment of trachoma is systematic prophylaxis.

NOURRY WINE.—This wine, sold by E. Fougera & Co., is said to contain 12 per cent alcohol and 1½ gr. iodin to the fluidounce in combination with tannin. Examination in the A. M. A. Chemical Laboratory showed that its action would be that of ordinary iodid and that the non-production of iodism is due to the small amount of iodin it contains. Claims are made which are prone to lead to its use both by the profession and the public in conditions in which effective medication is called for. The Council on Pharmacy and Chemistry refused recognition to Nourry Wine. (*Jour. A. M. A.*, December 12, 1914.)

A NEW AND APPARENTLY SUCCESSFUL METHOD FOR THE THERAPEUTIC USE OF TYPHOID VACCINE.*

BY

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It is evident that the presence in the human organism of living virulent typhoid bacilli, together with their toxines, resulting in the clincal entity we term typhoid fever, excites, by their mere presence and activity, the gradual production of specific antibodies, which occasions the gradual annihilation of the infection and the recovery of the infected individual in about 90 per cent of all cases.

In a laboratory manner, this antibody production is demonstrated by the presence in the sera of the vast majority of all typhoid cases, of specific bacteriotropic and agglutinating properties, usually as early as the second week, by the Widal test.

Recovery, as a rule, is unusual in typhoid cases where these properties are not developed; though recovery may not follow in every case which at the onset did exhibit such properties. Still, as a general rule, the continued presence of a strong positive Widal reaction during the course of a typhoid case, is a rather favorable prognostic, and its complete disappearance should occasion considerable worry.

The sera of individuals who have undergone active immunization by the typhoid prophylactic vaccination, show these same bacteriotropic and agglutinating properties. What, then, more natural than that attempt should be made with this same vaccine to hurry and stimulate this specific antibody formation in cases already ill of the disease?

In the use of tuberculin in tuberculosis, essentially an analogous vaccine treatment, it is now practically universally admitted that decidedly fewer untoward results will occur, and the treatment is of infinitely less risk to the patient, if a dosage be selected which will produce a minimum general reaction, or better still, no reaction at all. How much more so ought this to be true in the case of typhoid, where a febrile reaction of considerable intensity already exists, indicating a negative phase of decided severity. Or, in other words, in typhoid where the patient is already suffering from an abundance of circulating toxines, why add to his load more than the barest additional amount necessary to secure results. The usual dose of 50 to 100 million organisms, at times, no doubt, is of benefit but must carry to a certain number of patients a more prolonged negative phase, give greater constitutional reaction and be of appreciably more risk than the smaller doses of 3 to 5 million organisms, as I use them. And the results by this safer method are apparently just as satisfactory, if such results as I have secured in the cases I am now reporting are to be expected in future investigations.

Initial small doses are correct with any vaccine, as there exists no method of previously determining the sensitiveness of the particular individual involved, and on occasions this sensitiveness presents itself following doses ridiculously small. I have seen it in tuberculosis follow less than 1.1,000,000 mg. of tuberculin, which would correspond to only about 50,000 bacilli, about 1/100 part of the arbitrary initial typhoid dosage I have selected, and moreover, such minute doses will often bring about the desired clinical betterment.

While it is true that tuberculosis is not typhoid, we must not forget that the tuberculin treatment of tuberculosis is the oldest, most thoroughly tried out and probably the most successful example of vaccine therapy we possess; and it is reasonable to suppose that the similar handling of typhoid might produce similar successful results.

The essential points to be learned in this connection, is that the smallest dose of any vaccine that will produce clinical betterment is the correct dose, and the doses of vaccine used today generally in typhoid and other infections are unnecessarily large; and this very excess of dosage is often the cause of failure where success might reasonably have been anticipated.

I have had the opportunity of trying out this method, also, in several cases of gonorrhoea, treated exclusively by vaccine therapy. In my hands, at any rate, this method of minute dosage, reaching to a bare local and focal reaction, has proven far more successful than with the larger doses usually recommended; and in gonorrhoea, also, the 50,000,000 doses may not only be useless but at times harmful. Recently I saw in a case of chronic posterior urethritis a most intense focal and systemic reaction, accompanied by severe acute prostatitis, produced by 15,000,000 organisms of an autogenous culture. This severe negative phase, following only 1/3 of the usual recommended initial dosage, lasted about 4 weeks.

TECHNIQUE.

The culture used in all these experiments was an ordinary prophylactic stock culture, diluted with freshly boiled water. An initial dose of from 3 to 5,000,000 organisms is selected. The sicker the case, the smaller the dose. The injection is made sub- and not intracutaneously. Within 24 hours, even with these

*Read before the Section on Medicine and Diseases of Children, State Medical Association of Texas, Fort Worth, May 6, 1915.

*The preliminary report of these experiments was published in the February, 1914, issue of the TEXAS STATE JOURNAL OF MEDICINE.

small doses, a hyperaemic area develops at the site of the injection. An area the size of a 5 cent piece can be considered a good positive skin reaction. No impression is made on the temperature chart following this initial dose—occasionally a slight rise of ½ to 1 degree is seen. But within 48 hours there should be a slight improvement in the general condition. The facial expression becomes brighter and the cases seem less typhoidal, so to speak. From my work it appears that a positive phase following this dosage, is not induced before the expiration of 72 to 96 hours. At this point usually a decline in temperature appears, at times assuming the wide morning remissions and a high evening rise so characteristic of the third week of the disease. Whether this decline appears or otherwise, the dose is now repeated. If, following any single injection a decline in temperature or a slow lysis is induced, the injections are not repeated until the decline ceases. But I have almost invariably had better results by repeating the initial dose on the third or fourth day, whether there are indications of decline or otherwise. It is following this second dose, given at the onset of the positive phase, that improvement usually becomes evident. If the local reaction at this time be slight, or absent, the next dose is doubled, and can be given 2 or 3 days later. If present and moderate, this next dose is not increased. That is, the initial dose, the interval to the second dose, and the second dose, are more or less arbitrarily fixed. The size and intervals of the succeeding doses are governed by the local reaction and the temperature chart. If there is a decline, as is usually the case, no dose is given until the cessation of this decline, when the dose producing the decline is repeated, and doubled only if further decline is not induced. However, an immunity is often induced against this local reaction by two or more repetitions of the same dosage, so that no local reaction is secured. Precisely similar results often occur in the tuberculin treatment of tuberculosis. Such failure to obtain local reaction is almost invariably accompanied by failure to obtain the desired temperature drop. It is under these conditions that the dose is doubled. Three million is the smallest dose I have used and the largest terminal dose in this series was 20 million, itself a smaller dose than the initial dose in use by other observers.

The general treatment in these vaccine treated cases, consisted of the usual baths, given when the temperature reached 102.5° F. every 3 hours, if necessary, and milk and albumen water for diet until defervescence was established. Enemata were given as indicated, usually every other day. Not a single case received other medication, except stimulants when required.

The general results secured in these 17 cases I summarize below:

Entrance diarrhoea and headache cleared up within 48 hours. There were no distended abdomens, no hemorrhages, in fact, the only complication seen was a slight mastitis in case 17. There was but a single relapse, which came after the temperature had reached normal on the 10th day, and it is questionable how much of the febrile return in this particular instance was due to typhoid and how much to the pulmonary tuberculosis for which this patient is at present (9 months later) under treatment.

But the most remarkable result secured in this series of cases is in the shortening of the duration of the disease.

Of the 16 cases that recovered, 14 became completely and permanently afebrile in 18 days or less, following the first vaccine treatment; 12 in 16 days or less; 11 in 13 days or less, and 5 of the 16 in 10 days or less. Certainly this is a far better record than can be expected of the usual routine expectant treatment. And it must not be overlooked that of these 16 recovery cases, 1 only could be classified as mild, 8 were moderately severe, while 7 were decidedly sick. In 3 of the cases this line of treatment was instituted as a last desperate hope. These figures are decidedly suggestive that this line of treatment possesses actual value.

There was one fatal case in this series, a desperately sick 12 year old boy, an ambulant, neglected case, in the second or third week, with entrance temperature of 105°. The first injection gave some improvement. The second, four days later, of the same size, gave none, not even a local reaction. A double dose the next day gave no different results, showing that the patient had lost his ability to react, in precisely the same manner as do all last stage cases of tuberculosis fail to react to the various tuberculin tests. This patient was delirious during his entire stay in the hospital, with a miserable pulse, constantly shivering in spite of hot water bottles, and was made worse by every bath, cold or hot. I regret that I did not start in this instance with a smaller dose. 5 million to a child 12 is practically equivalent to 15 or 20 million to an adult.

As my only fatal case occurred when I exceeded my usual dosage, I am the more firmly convinced that the small trial dose of 3 to 5 million is correct, and should not be exceeded. As a matter of fact, this fatality should not be ascribed to the method I advocate but to my deviation from it, in an attempt to secure earlier results.

What is new in this work is the discovery of a correct, arbitrary initial dosage, though this dosage has in a few instanees been used but not favorably commented on, probably by reason of too early repetition in larger doses;

the discovery of the correct time required for the formation of specific antibodies; the repetition and non-increase of the initial dose at this time, and the guidance of succeeding doses by the extent of the local and constitutional reactions produced.

CASE SUMMARY.

Case 1.—Barrow. City Hospital. Rose spots; enlarged spleen; positive Widal. Sick 8 weeks in hospital previous to vaccine treatment. Type severe. Myocarditis; hypostatic pneumonia; pulse 108 to 120; respiration 32 to 40. Was delirous or comatose, with incontinence of urine and faeces. 2 injections. Completely afebrile 13 days after the first injection.

Case 2.—Miller. City Hospital. Rose spots; enlarged spleen; positive Widal. Sick 7 to 10 days. Type fairly severe. Number of injections, 3. Afebrile in 12 days.

Case 3.—Case of Dr. T. T. Jackson, Santa Rosa Hospital. Rose spots; enlarged spleen; positive Widal. Sick 23 days in hospital previous to vaccine injection. Type, moderate. Number of injections 3. Afebrile in 6 days.

Case 4.—Wheeler, negro. City Hospital. Enlarged spleen; positive Widal; no rose spots. Sick 7 to 10 days. Type, severe; entrance temperature, 105. Number of injections, 3. Afebrile in 10 days.

Case 5.—Camarro. City Hospital. Rose spots; enlarged spleen; positive Widal. Sick 8 days. Type, severe, with temperature around 104° for the first 4 days. Number of injections, 7. Afebrile in 33 days.

Case 6.—Johnson. City Hospital, a half starved, emaciated patient from the county jail. Sick 10 to 14 days. Rose spots; enlarged spleen; positive Widal. Type, severe; entrance temperature, 104. General condition miserable. 3 injections. Afebrile in 17 days.

Case 7.—Zamorro. City Hospital. Enlarged spleen; positive Widal; general urticaria; rose spots doubtful. Type, moderately severe. Number of injections, 4. Afebrile in 13 days.

Case 8.—Case of Dr. C. C. Cade, Wyeth Hospital. Enlarged spleen; rose spots; positive Widal; high leucocyte count, due to complicating pyelitis. Sick 7 to 10 days. Type, moderately severe. Number of injections, 1. Afebrile in 2 days.

Case 9.—Vasquez, City Hospital. Enlarged spleen; no rose spots; Widal negative until the third attempt. Typical tongue and dicrotic pulse. No facilities for blood culture. Sick 7 to 10 days. Type, mild. Number of injections, 3. Afebrile in 10 days.

Case 10.—Mahavier. City Hospital. Enlarged spleen; rose spots; positive Widal. Sick about 3 weeks, up most of the time. Thoroughly septic. Temperature around 105° during entire stay in hospital. No response to baths. Practically no nourishment taken. After fourth day, practically continuous salt solution by the rectum. Number of injections, 3. No response. Died on the 8th day. This case, the only failure in the series, would, I believe, have died under any line of treatment.

Case 11.—Startz. Patient of Dr. J. A. Watts. Sick 3 to 4 days. Type, moderate. Rose spots; spleen enlarged; Widal positive on second attempt. Number of injections, 3. Afebrile in 13 days.

Case 12.—Patient of Dr. J. A. Watts. Sick about 10 days. Type, moderate. No rose spots; spleen enlarged; Widal positive. 3 injections. Afebrile in 10 days.

Case 13.—Hybarger. Patient of Drs. Wooten and Decker. Sick 7½ weeks in bed. Vaccine treatment first administered during third week of a relapse. Type, extremely severe—treatment given as a last desperate resort. Spleen enlarged; rose spots; Widal positive. Number of injections, 3, of 5,000,000 each. Afebrile in 12 days.

Case 14.—City Hospital. Patient of Dr. Wooten. Record and name lost. 2 weeks in bed. Spleen enlarged; rose spots; positive Widal. Type, one of considerable severity. 3 injections, of 5,000,000 organisms, at 72 hour intervals. Afebrile in 12 days.

Case 15.—Ferguson. Patient of Dr. Wooten. Sick one week. Spleen enlarged; rose spots; positive Widal. Severity, moderate. At end of first week of expectant treatment, given 5,000,000 organisms. Two other injections of same size given at 72 to 96 hour intervals. Afebrile in 18 days.

Case 16.—Busson. Seen with Dr. W. H. Doty. Had been sick four weeks in bed, under expectant treatment. At time of first vaccine injection was wildly delirious, with temperature running from 103° to 105°. No response to baths, cold or hot; pulse 120; spleen enlarged; rose spots so numerous that the case closely resembled measles; Widal positive; toxaemia intense and outlook desperate. Given 5,000,000 organisms with local reaction but no clinical betterment. 96 hours later given 5,000,000 organisms, with some reaction and clinical betterment. There was no improvement in temperature, but now responded to baths. Delirium gone. Intense diarrhoea gone. Tongue moistening. 7,000,000 organisms given 3 days later, with reaction and temperature dropping at once. 10,000,000 organisms given 3 days later, and 5 days later temperature was normal. Completely afebrile in 15 days.

Case 17.—Helder. Seen with Dr. M. J. Bleim. Sick 7 to 10 days. Spleen enlarged; rose spots doubtful; Widal positive. Type, moderate. 2 injections. Practically afebrile in 10 days. Relapse lasting 20 days followed, possibly tuberculous in origin. Is now, 9 months later, under treatment for tuberculosis.

DIAGNOSIS OF PANCREATITIS, WITH REPORT OF CASES.*

BY

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The first case of pancreatitis recorded, so far as I know, was reported by Claessen in 1842. Since then the number of reported cases has been very small, until quite recently. During the past few years more cases of disease of this organ have been reported than in the whole preceding sixty years. Disease of the pancreas is still considered comparatively rare, however, and for obvious reasons, chief of which has been its absolute inaccessibility to ordinary methods of inspection, palpation or chemical examination of its secretions. It is probable that few of us have ever correctly diagnosed a

*Read before the Section on Medicine and Diseases of Children, State Medical Association of Texas, Fort Worth, May 6, 1915.

subsequently demonstrated case of pancreatitis, and it is quite possible that the majority of us have never seen a definite case which was recognized before operation or autopsy. Suffice it to say that, as a result of the infrequent recognition of this disease, it is generally considered to be extremely rare in occurrence.

I think it may be safely stated that the pancreas is the most important single glandular unit in the machinery of digestion. A man can live without a stomach; he can thrive when deprived of a large part of his intestines; when minus a gall bladder he can live in perfect health; with a liver practically gone he can live for awhile; but take away his pancreas and he will die. The greater part of the chemical digestion of the food is done by the secretions from the pancreas, the amount of secretion from which is estimated as from one to two quarts in twenty-four hours. From a theoretical point of view, also, when we consider the numerous inflammations, atrophies, hypertrophies, scleroses, etc., to which all of the other vital organs of the body are heir, is it not reasonable to suppose that this hard working organ is just as often affected? As a matter of fact, from a practical point of view, recent work seems to show that such is the case. Unfortunately, a slight sclerosis of the pancreas, enough sclerosis even to cause definite symptoms, may not be recognized even on direct palpation of that organ, although, usually, differences of consistency and size, when marked, can be detected by an experienced surgeon or pathologist, grossly. Because of this peculiarity of the pancreas, it requires a surgeon of considerable experience and judgment to diagnose such a condition grossly, during operation. Routine histological sections of pancreases, removed at autopsy, however, reveal more interesting facts. Major (13) showed, in a thorough study of microscopical sections of pancreases from patients dying of various diseases, that over 50 per cent had pathological changes of greater or less degree.

That pancreatitis can be diagnosed more often clinically than it usually is, however, is evident from the number of cases reported during the past few years. This increase in the number of correctly diagnosed cases is due undoubtedly to two factors: First, to improved clinical knowledge; second, and by no means least, to improved methods of studying the pancreatic secretions directly.

I offer as an excuse for this paper, certain recent work in the diagnosis of pancreatitis with the aid of this latter method of study. It will, perhaps, not be out of place to consider briefly the clinical findings in certain forms of pancreatitis.

Acute pancreatitis is probably correctly diagnosed clinically more often than any other form of disease of that organ because the symptom-complex is becoming clearer as times go on. Quite a number of cases have been reported, along with careful description of the clinical pictures presented. Among these reports two studies stand out prominently as being of great value. Jenckel (11) reports ten cases demonstrated either at operation or autopsy. All of these cases, except one, were, according to him, correctly diagnosed before operation. The chief clinical features of his cases, upon which he based his diagnosis, were as follows: Sudden pain, followed by collapse, was often present; the pulse was practically always relatively rapid, while the temperature was usually comparatively low; pallor and sweating were present, as a rule. A very important sign, according to Jenckel, was marked tenderness above the navel, the tenderness not being localized at one point, however, but extending *across* the epigastrium. Instead of the marked muscular rigidity which one would expect in the usual acute abdominal condition, there was usually no such rigidity in acute pancreatitis. On the contrary, abdominal distention was usually an important feature of the picture. There is usually a bowel stasis and vomiting is often present. The typical picture presented in this disease, therefore, is that of acute intestinal obstruction, and as a matter of fact, this is the condition for which it is usually mistaken.

Three of the cases reported by Jenckel were especially interesting because of the presence of abdominal tumors as a complicating factor. All three of these tumors proved to be composed of degenerated fat, encapsulated in fibrous tissue, and are explained as the results of previous attacks of pancreatitis, during which lipase (the fat digesting ferment) was set free in the abdominal cavity, destroying the abdominal fat and forming the neucleus for the development of a fibrous tumor. Of Jenckel's operated cases (seven in number,) four lived and three died. Gall-stones were a factor in the disease in only three out of ten cases.

Eve (10) also reports an extremely interesting series of cases of acute pancreatitis. His series consists of eleven cases, all demonstrated by section. The symptoms described by Eve as characteristic of this disease are almost identical with those given by Jenckel. Eve emphasizes particularly the tendency to mistake the picture for that of intestinal obstruction. Gall-stones were a complicating factor in 64 per cent of Eve's cases; the other causes ascribed were, infection and stasis; all of his cases died. As a result of a careful study of the reported cases, and of a limited personal experience with this disease, it seems to me that the chief essential in the correct diagnosis of

this particular condition, is to think of it more often in making diagnoses.

A clinical diagnosis of the more common disease of chronic pancreatitis presents a somewhat more difficult problem. In fact, it was stated by Opie in his book on the pancreas, published a number of years ago, that such a diagnosis was impossible. Further study and more extensive experience have, however, shown that this statement is not entirely true. The most extensive studies on this subject of which I am aware, are those of Cammidge (3), who reports 414 cases collected during a period of ten years. The characteristic symptoms are described as loss of appetite, nausea, colicky pains recurring at irregular intervals, loss of weight, and either diarrhoea or constipation; tenderness over the epigastrium, usually extending across instead of being localized, is also present in many of these cases. Jaundice may be present in the late stages. Cammidge places great emphasis upon the stool examinations in diagnosing this condition, particularly upon the presence of large amounts of neutral fats. The typical text-book picture of a copious, greasy, foul-smelling stool, is rarely found. It is the belief of Cammidge that chronic pancreatitis is by no means uncommon, and that it is a frequent cause of indefinite digestive disorders.

Recently, numerous other cases of chronic pancreatitis, diagnosed clinically by means of improved laboratory methods, have been reported; and, since these methods, according to all workers who have used them at all extensively, are of considerable importance, I shall describe them in more or less detail, and also shall report a few cases of my own, studied by means of these methods.

I refer to three methods of direct study of the pancreatic ferments. First, and most important, the quantitative and qualitative tests for pancreatic ferments in the duodenal contents, removed through the duodenal tube; second, to the quantitative and qualitative study of diastase and trypsin in the stools, and third, to the quantitative study of diastase in the urine. Previous to these tests, all of which are new, the laboratory offered no very satisfactory assistance in the diagnosis of pancreatitis. We had the glutoid capsule of Sahli; Schmidt's method of searching for undigested neuclei in the stools; Muller's digestion of coagulated ox serum by the stools, and the Cammidge reaction. All of these were unsatisfactory.

A fair number of cases of chronic and subacute pancreatitis have already been diagnosed by means of the direct study of the pancreatic secretion, removed through the duodenal tube (4, 9, 6, 1, 5, and a few of my own which I desire to report to this Association.) The technique of this test varies somewhat in the hands of different individuals. The principle is the same in all, however. In our work at the John Sealy Hospital, the following technique is used:

The suspected patient is instructed to eat no breakfast; the stomach must be perfectly empty; a duodenal tube* is then introduced into the stomach, through which it passes normally in a few minutes into the duodenum. The yellow, bile-stained duodenal contents are allowed to flow until a sufficient amount of neutral or alkaline fluid is obtained for the tests. 5 c. c. are sufficient, but usually one obtains from 20 to 50 c. c. in a half hour. It is important, in patients showing a high gastric acidity, to be sure that the duodenal contents to be tested are neutral or alkaline to litmus, or, at least, very faintly acid, since the presence of any appreciable amount of acid will destroy the diastase and lipase, this leading to a false interpretation. In most cases, however, by testing the duodenal contents with litmus paper from time to time a sufficient amount of suitable material can be obtained within a half hour. With a very highly acid stomach, it is occasionally necessary to leave a tube in overnight before a suitable secretion can be obtained for testing. Fortunately, the average case shows very little acidity in the empty stomach contents, so that all of the duodenal contents removed are suitable for testing. With a satisfactory specimen the test for the ferments is carried out as follows: A 1 per cent starch solution is prepared by adding 1 gm. Kahlbaum's Soluble Starch to 100 c. c. of cold distilled water and mixing well. This is then heated slowly, with continued stirring, until perfectly clear. Into each of seven test tubes five c. c. of this solutions are placed; to tube 1 is then added 1 c. c. of the duodenal contents; to tube 2, 0.5 c. c.; to tube 3, 0.25 c. c.; to tube 4, 0.1 c. c.; to tube 5, 0.05 c. c., and to tube 6, 0.01 c. c.; tube 7 is the control. For testing for trypsin, 100 mgs. each of casein and sodium bicarbonate are added to 100 c. c. of distilled water, which has been previously warmed. The mixture is then rapidly brought to a boil and cooked for one minute, stirring meanwhile. 10 c. c. of this solution are then added to each of the seven test tubes, to each of which the same amounts of duodenal contents are added as in the test for diastase.

The test for lipase is much more simple. A pure, neutral olive oil is essential. The olive oil must be neutral or only very slightly acid when titrated with phenolphthalein and N/10 sodium hydroxide (we have found Heinz' the most satisfactory.) To one of these tubes is then added 2 c. c. of the duodenal contents; the other is used as a control. All of these test tubes, 16 in number, are then incubated for two hours at 37 degrees centigrade. At the end of that time they are removed and treated as follows: Each of the tubes containing the starch solution is filled to within an inch of the brim, with cold tap water; two or three drops of tincture of iodin or Lugol's solution are then added to each tube; if diastase is present in normal quantities all tubes, except the control, will give either a red or a yellow color with the addition of the iodin solution, while the control tube will turn a deep blue. If none of the starch is digested, diastase may be said to be entirely absent. If any of the tubes, except the control, show an absence of starch digestion, the diastase may be said to be diminished; while if there is digestion in only the first one or two tubes, it may be said to be markedly diminished. The normal quantity of diastase in the duodenal contents, with an empty stomach, is from 500 to 2,500 diastatic units (1 per cent starch solution, incu-

*A "Jutte" duodenal tube is used by us.

bated for two hours.) That is, 1/100 of a centimeter, or less of duodenal contents, will digest 5 c. c. of 1 per cent starch solution in this time. For safety's sake, however, it is well not to draw any definite conclusions unless there is an absence of digestion in all tubes, or at least, in all except possibly the first two. A second test should always be carried out before a final diagnosis is made.

The test for the digestion of the casein solution by the trypsin is carried out by simply adding to each of the seven tubes three or four drops of a 3 per cent acetic acid solution. If the casein is digested no precipitate will form with the addition of the acetic acid. If no digestion has taken place, a milky, flocculent precipitate will instantly appear on the addition of the acetic acid. Normally, all tubes, except the control, show practically complete digestion. No definite conclusions should be drawn, however, unless digestion is absent in all of the tubes, and the test should be repeated with a fresh specimen, if necessary, as in the case of diastase.

The test for the digestion of the neutral olive oil by the lipase, is carried out by simply titrating the digested oil with N/10 Na OH, using phenolphthalein as an indicator. If there has been a splitting of the neutral oil into its components of glycerine and fatty acid, by the action of the lipase, the acidity will have risen from neutral, or practically neutral, to from 100 to 500 acidity per cent (the reading being made as in the titration of the acidity of gastric contents.) A complete absence of lipase or a very marked diminution (10 or 15 acidity per cent,) has the same significance as does the absence of either of the other ferments, granting that the duodenal contents were tested while perfectly fresh. It must be borne in mind, however, before drawing any conclusions, that lipase rapidly perishes with age, a few hours at room temperature being often sufficient to either destroy it or cause a marked diminution in its strength.

Practically all observers are agreed that the continued absence of one or all of these ferments, from a neutral or alkaline duodenal contents, is characteristic of pancreatitis of some kind.

The second important test used in the diagnosis of pancreatitis, is the quantitative estimation of diastase and trypsin in the stools. This is carried out in the same manner as are the tests for their presence in the duodenal contents, except that, since their quantity is much diminished in the stools, as compared with the fresh duodenal contents, 2 c. c. of a 1-1000 solution of soluble starch are used in each of ten tubes, instead of 5 c. c. of a 1-100 solution. To each of these ten tubes is added 2; 1.5; 1.25; 1; .75; 0.5; 0.25; 0.1; 0.05, and 0.01 c. c. of the stool extract. This stool must be very carefully obtained, and upon the care with which it is obtained, depends the success of the test. The technique we have found useful in obtaining such stools, is that recommended by Brown of Johns Hopkins (2.) The patient is placed upon a soft, or preferably a liquid diet, for at least two days preceding the test. On the night preceding the test a high s. s. enema is given. At 7 a. m., 750 c. c. of milk are given; at 7:30 a. m., one-half ounce epsom salts is given; at 8 a. m., one-half ounce epsom salts is repeated; at 8:30 a. m., one glass of water containing one-half drachm sodium bicarbonate is given. All stools passed after the expulsion of the high enema are saved up to 1:30 p. m., when an enema of 1000 c. c. of normal salt is given, and saved when expelled. The results of the normal saline enema, plus any stools which may have been passed, are sent to the laboratory immediately and diluted up to 3000 c. c. with normal saline. After thorough mixing, a centrifuge full of this is obtained and centrifuged for a few minutes. The supernatant fluid is the extract referred to in describing the test. These ten tubes, plus one control, are then incubated for one-half hour in the water bath, or for one hour in the incubator, and at the end of that time are tested for starch digestion as above described, using, however, instead of pure tincture of iodin or Lugol's solution, as in the other test, a very dilute solution of the same (1-10.) In a normal case we will note a complete digestion of the starch solution in all of the ten tubes, or at least in the first five or six. An absence of digestion in the first one or two tubes means a marked diminution of diastase. The test should be repeated, however, before drawing sweeping conclusions. Trypsin in the stools may be tested for in the same manner as diastase, using 5 c. c. of casein solution in each of the ten tubes, and incubating for one hour.

Brown reports six cases of chronic pancreatitis studied by this method, in all of which a marked diminution in the amount of diastase was noted. A large series of controls, in various disorders, including achylia gastrica, showed normal readings. I shall report also two cases of pancreatic trouble, in one of which diastase was completely absent from the stool, and in the other was markedly diminished.

The third laboratory aid to the diagnosis of pancreatitis was first thoroughly studied by Wohlgemuth (19) and later by others (16, 12, 2, 15.) It is generally agreed that any acute pancreatic injury (acute pancreatitis) or any obstruction to the pancreatic ducts, such as tumor at the head of the pancreas, always causes an increase in the urinary diastase and it is believed by many that a definite increase of diastase in the urine, over the normal, is of significance in diagnosing such conditions. The normal amount of diastase in the urine is according to Wohlgemuth (18) D 38°/30′=16 to 64, (1-1000), which is to say, that 1 c. c. of urine will normally digest from 16 to 64 c. c. of a 1-1000 starch solution in one-half an hour, when incubated at 38 degrees. In interpreting the results of this test, however, it is well to bear in mind the fact that diastase is markedly diminished in the urine in chronic interstitial nephritis, and is increased in certain cases of parenchymatous nephritis (18), also in starvation.

The cases of demonstrated pancreatic disease that have come under my observation during the past three years, have, unfortunately, been limited to three. I have, however, noted, in addition to these three demonstrated cases, four cases in which I feel morally sure there was pancreatic mischief, although I am not able to say with certainty that such was the case, since none of these four were operated. The three demonstrated cases are as follows:

Case 1.—Negro woman, age 45. Complained of pain in the stomach, with vomiting. Family history

negative; personal history negative; present illness began four months previously with pain, usually one or two hours after meals, and periodic attacks of vomiting; loss of weight; jaundice past two weeks; tenderness across abdomen, especially under right C. M. Pancreatic ferments and bile completely absent from duodenal contents; diastase absent from stool (Brown's method) on one occasion and present only as a trace on the next occasion; urine shows diastase slightly increased (120 D 38/30.) Diagnosis of malignant growth at head of pancreas, confirmed at operation and later at autopsy.

Case 2.—Man, age 30. Complaint, pain in abdomen; family and personal history negative; present illness began two years ago with attacks of pain, colicky in nature, coming on usually several hours after meals; has periods of freedom from severe pain extending over several months at a time; no vomiting; constipated. Examination showed healthy looking man; considerable tenderness across the epigastrium, more to the right; slight rigidity over the upper right rectus; duodenal contents showed absence of lipase and trypsin; diastase present (250 D 38/2 hrs. 1-100); stools showed considerable azotorrhoea; diastase not tested for in stools; no blood in stools; urine showed normal diastatic content. Diagnosis: Probably chronic pancreatitis. Operation showed numerous adhesions over the head of the pancreas; pancreas much hardened and thickened, and an indurated ulcer of the second part of the duodenum.

Case 3.—Mexican, age 40. Complaint, pain in stomach; family history negative; personal history, chancre; otherwise negative. Present illness began two years ago with pain in upper abdomen, usually coming on from 15 to 20 minutes after meals. Loss of weight; appetite poor; constipated. Intervals of improvement in symptoms, but never entire relief. Physical examination showed a poorly nourished man; considerable tenderness on pressure over the epigastrium, especially slightly to the right of the mid-line; also tenderness over McBurney's point. Duodenal contents showed complete absence of diastase and lipase, but the presence of trypsin. Stools obtained after the method described showed digestion of starch through the sixth tube (200 D. 38/1 hr., 1-1000.) Steatorrhoea was also noted; urinary diastase normal. Diagnosis of probable chronic pancreatitis. No improvement after two months of anti-syphilitic treatment, including salversan. Operation by Dr. Thompson showed nothing abnormal in the abdomen, except a distinct hardening and thickening of the head of the pancreas, while the body and tail of that organ were apparently normal.

The four other cases mentioned as having been considered probable cases of pancreatitis, although not so demonstrated, were as follows:

Case 4.—Young man of 25; symptoms and signs suggest ulcer of the stomach; duodenal contents on two examinations showed complete absence of lipase, with a marked diminution of the other ferments. Refused operation. Some improvement after careful diet, but still complains of the same troubles to less degree (1 year.)

Case 5.—Man, age 50; family history negative; personal history, alcohol to excess, otherwise negative. Present illness, duration one year; consists of pains in the stomach, usually shortly after eating, belching, loss of appetite and diarrhoea. Physical examination shows sign of loss of weight with general epigastric tenderness but no rigidity. Gastric examination shows chronic gastritis with marked hypoacidity; duodenal contents show complete absence of all ferments; stool examination for diastase shows it to be present, but in a markedly diminished quantity (digestion in tube 3 only.) Refused operation.

Case 6.—Age 42; complaint, belching, pains in the stomach. Family and personal history negative; present illness began six months previously; pains not connected with meals, but come on at indefinite intervals. Physical examination shows slight tenderness over the epigastrium, otherwise negative; gastric contents normal; duodenal contents show complete absence of all ferments; stools not examined for diastase; azotorrhoea present.

Case 7.—Man, age 28. Complaint, severe abdominal cramps; family history negative; personal history negative, except for a similar attack two years previous. Always constipated. Present illness came on suddenly, about mid-day, with severe epigastric pains, vomiting and collapse. Physical examination (seen at home during attack) showed pallor, sweating, pulse 120, temperature 99; abdomen tender in upper half, especially to the left of the mid-line, just below C. M.; no marked muscular rigidity; slight distention; patient in great agony from colic, which was relieved only after three one-fourth grain doses of morphia, administered hypodermically. On the following day, when it was possible to palpate the abdomen more carefully, a hard, movable tumor, about the size of a hickory nut, was noted under the left costal margin, slightly to the left of the mid-line. This tumor could be constantly made out thereafter, by placing the patient in an upright position. Patient states that pressure on the tumor causes the same kind of pain which was experienced during attacks of colic. Urine collected the following morning after the attack, showed the presence of about one per cent sugar and a marked increase in urinary diastase (150 D 38/60, 1-1000,) otherwise negative. Stools were hard, and showed azotorrhoea. Patient showed sugar continuously in his urine for six months after this acute attack, on an average diet. Sugar always disappeared on a carbohydrate free diet. No further complaint, other than an occasional "sick headache," which has now almost disappeared (18 months.) During observation, it was noted by the patient that the ingestion of large amounts of fats would cause digestive disturbances, diarrhoea, heart-burn, belching, headache, etc. He thrives, however, on a vegetable protein diet, with a moderate amount of carbohydrates and fats. Unfortunately, the duodenal contents could not be examined during the acute attack. Examination a week later, however, showed trypsin and diastase present as usual, but a marked diminution of lipase.

It might be well to state before closing, that the above seven cases constitute all of the cases coming under our observation during the past two and one-half years, in which we have noted any very striking changes in the pancreatic ferments, by means of any of the methods mentioned. During this time, we have examined the duodenal contents of some one hundred and fifty patients, about one hundred and twenty of whom were suffering from some form of gastric disorder. In other words, these seven were the only ones out of one hundred and fifty which showed any signs of pancreatitis, according to the laboratory methods which we applied.

In conclusion, I think we may briefly summarize as follows:

First, pancreatitis probably causes a great varity of digestive disorders, usually attributed to the appendix, abdominal adhesions, gall bladder, stomach, etc.

Second, in the laboratory we have a material aid in studying the functional capacity of the pancreas.

Finally, I wish to express my appreciation and thanks to Prof. M. L. Graves for encouragement and support in this work, in whose service at the John Sealy Hospital most of our cases were observed. Also, my thanks are due to Dr. R. W. Knox for permission to study numerous interesting cases at the Southern Pacific Hospital, in Houston.

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REPORT OF COMMITTEE FOR THE STUDY OF VENEREAL DISEASES.*

BY

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At the last meeting of the State Medical Association, held in Houston, a committee was created for the study of venereal diseases.

It is presumed, and the presumption seems amply supported by information gleaned from various sources, that in Texas the prevalence of venereal disease and the far-reaching consequences thereof, are neither greater nor lesser than found elsewhere throughout the country.

It has been considered advisable to freely consult authorities working in this special field, in order that the accumulated knowledge may be reported in a condensed form. In particular has attention been paid to the question of the actual prevalence of venereal diseases, as well as the suggested means for the lessening thereof.

Preeminently dominating the field of endeavor in stamping out the so-called "Social Evil" is the Society of Sanitary and Moral Prophylaxis, an organization founded by the late Dr. Prince A. Morrow of New York. This organization has been in existence for the past ten years, and numbers among its members the foremost educators of the country. Branch organizations have been formed in various states, and it has been the aim of these organizations, working independently of the New York Society, to lay before the public by means of lectures, appropriate literature, etc., the facts pertaining to the widespread prevalence of venereal diseases, their damage to society, and discussions of the most feasible means of control.

Regarding the prevalence and consequences of venereal diseases, little remains to be said. That the so-called social or venereal diseases are on the increase is not disputed. The cause for this increase is said to be the overcrowding in our larger cities, which makes for the spread of unsanitary conditions not coming under control of health boards. That one-tenth of our population is syphilitic, either actively or possessing an hereditary taint; that 80 per cent of the operations done on the pelvic organs of women are the result of gonorrheal infection; that the vast majority of inmates in our asylums for the blind are there as a consequence of an ophthalmia contracted at birth; that 90 per cent of childless marriages are due to a previous existing gonorrhea in either husband or wife, and that 85 per cent of all men 35 years of age have had at least one attack of gonorrhea, are facts borne out by statistics compiled by careful observers.

In view of the foregoing statements, which remain unchallenged, the fact that venereal disease plays sad havoc from a sociologic and economic standpoint is most apparent. The question confronting us now is, by what means may we hope to secure relief. Among those measures chiefly advocated are, compulsory reporting of all cases of venereal disease; medical inspection of houses of prostitution; teaching sex hygiene in the public schools; a compulsory medical examination of both parties as a preliminary requirement for marriage, and a campaign of general education for the public at large, in order to acquaint them with the prevalence and danger of venereal disease.

It is our opinion that these measures would, if practicable, in no small measure curtail the ravages of the social evil; but unfortunately they all, save one, are met with insurmountable difficulties, a discussion of which could not be accomplished within the confines of this brief report. That remedy, however, against which

*Read by order of the House of Delegates, before a General Meeting of the State Medical Association of Texas, Fort Worth, May 5, 1915.

no argument can be made, is the campaign of general education, and in this we believe lies the only solution of the problem.

In the matter of general education, we, as physicians, should most naturally take the lead, and in the large cities of the east and middle west we now see our ablest men devoting a large share of their time and energy to public instruction in this particular. When we stop to consider that ten years ago a public speaker rarely dared to address a mixed audience on sexual matters, or even to admit that such a thing as the social evil existed, and that now such lectures are of frequent occurrence and well attended, we can readily see that the public is, to say the least, in an appreciative attitude for the reception of this knowledge, which so vitally affects their welfare.

Aside from the lecture platform it should be the duty of all physicians to instil the fear of venereal disease into the minds of their clientele, whether they practice as specialists or not.

In conclusion, we concur with Dr. Prince A. Morrow in the statement that "The most effective remedy available to modify or lessen the moral and physical evils which flow from venereal diseases is the general dissemination of knowledge respecting the dangers and modes of contagion of these diseases. It is by the persuasive force of enlightenment, by combatting the dense ignorance which prevails among the laity, especially among the young, upon whom the incidence of these diseases most heavily falls, that those evils can be diminished." This educational campaign is already well launched; its effects have already begun to be felt, and its continuance will bring to the public at large a realization of the besetting dangers of venereal disease, to the extent that it will then be no difficult accomplishment to enact laws which will in a great measure tend to reduce these diseases to a minimum.

THE COLLOIDAL GOLD REACTION OF LANGE IN THE SPINAL FLUID.*

BY

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The Colloidal Gold Reaction suggested by Lange, for the diagnosis of general paresis, syphilis and the meningitides, is based upon the discovery published by Zsigmondy in 1912, that various albumenous substances, mixed with solutions of colloidal gold in the presence of an electrolyte, would result in precipitations and color changes; and that in certain concentrations these same substances could exert a protecting influence, preventing these changes.

The description of the technic of this reaction is rather complicated, but the actual carrying out of the test is quite simple. The preparation of the colloidal gold solution from chloride of gold, the only difficult part of the whole reaction, is as follows:

One litre of double distilled ammonia free water is heated to sixty degrees centigrade, in a chemically clean, sterile, Jena glass beaker, and at this temperature ten cubic centimeters each of one per cent aqueous solution of gold chloride and two per cent aqueous solution of potassium carbonate, are synchronously added and thoroughly mixed. The temperature is then raised as rapidly as possible to ninety degrees centigrade, not exceeding ninety-five degrees. The flame is turned out and ten cubic centimeters of a one per cent aqueous solution of formalin are added slowly, while the mixture is briskly stirred. The gold undergoes reduction to the colloidal state, with a play of brilliant colors, through blue to purple and finally to red.

This solution should be a rich red cherry or garnet color, without any purple or blue shades, and should be absolutely clear. It will keep indefinitely exposed to light, at room temperature, but must be well stoppered to prevent evaporation.

All the chemicals used must be of the purest grade, and in distilling the water no rubber stoppers or connections can be employed. All glassware should be of chemically pure glass, chemically cleansed with hydrochloric acid, and rinsed with distilled water until all the acid has been removed and then used for this test alone. All solutions used in carrying out the test must be made with double distilled water.

The spinal fluid should be as fresh as possible; after a few days a positive spinal fluid will become negative. The needles used should be perfectly clean and dry. The presence of rust, or the contamination of the spinal fluid with blood, will seriously interfere with the reaction.

It is, of course, unnecessary to go into the technic of lumbar puncture, but a few words of suggestion and caution may not be out of place. We have made it a custom to secure the fluid in two tubes, using the contents of the first tube, which may contain a small amount of blood from trauma, for the Wassermann and other tests, and the second tube for the colloidal gold reaction. In a few cases quite severe headache has followed the puncture, and this has apparently been due to our having drawn away a little too much of the cerebro-spinal fluid. These headaches would disappear when the patient was recumbent, to reappear on as-

*Read before the Section on Pathology, State Medical Association of Texas, Fort Worth, May 6, 1915.

suming the upright posture. They passed off quite suddenly after about four days. The puncture causes practically no pain.

In carrying out the actual test, eleven test tubes, about 120x18 mm. in size, are set up in a suitable rack. 1.8 c. c. of a .4 per cent solution of sodium chloride, not over two weeks old, are placed in the first tube, and 1 c. c. each in the remaining ten. .2 c. c. of spinal fluid are

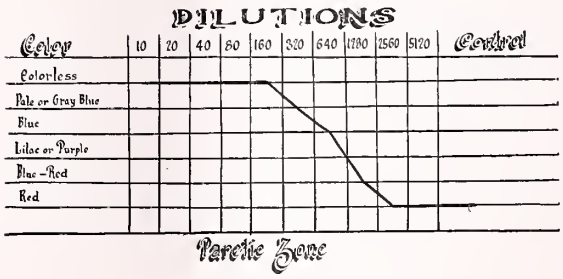

CHART 1. Paretic Zone.

now placed in the first tube, giving 2 c. c. of a 1-10 dilution of spinal fluid. 1 c. c. of this dilution is then placed in the second tube, giving 2 c. c. of 1-20 dilution; this is repeated to the tenth tube, the last tube then containing 2 c. c. of 1-5120 dilution. One cubic centimeter of this dilution is then thrown away, so that the ten tubes each contain 1 c. c. of their respective dilutions; the eleventh tube contains 1 c. c. of .4 per cent sodium chloride solution, and is used for a control. To each tube in the series is now added as quickly as possible, 5 c. c. of the colloidal gold solution, and the tubes then gently shaken.

If the test is positive, color changes will appear in five or ten minutes that will indicate in which zone the final reading will place the reaction, but this final reading should be deferred for twelve to twenty-four hours. According to the degree of color change and the

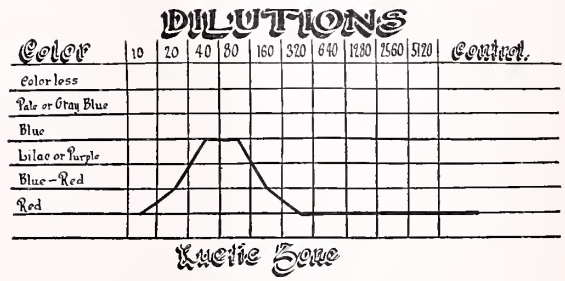

CHART 2. Luetic Zone.

dilutions in which the changes take place, the reactions are classified into three zones: The Paretic Zone (Chart 1,) shows complete precipitation in the first four to six tubes, then gradually less and less to an unchanged color in the last two or three tubes; the Luetic Zone (Chart 2,) shows a precipitation to a blue color in the 40 to 80 dilution, and the Meningitic Zone (Chart 3,) shows the greatest precipitation in the higher dilutions.

I have been able to carry out this reaction in twenty-one cases, one case was examined twice, making twenty-two tests altogether. This number is too small to permit me to draw any definite conclusions, but so far my experience tallies with the results obtained elsewhere. Twelve of these examinations were negative. These include three cases of syphilis, two cases of mental degeneracy, one paranoiac, one criminal, one aneurism, one epilepsy, one nephritis and two in which diagnosis was not made. Two of the three cases of lues gave negative blood and spinal fluid Wassermann reactions, and while clinically syphilis there is an element of doubt present.

Nine cases, ten examinations, gave positive results. One case, diagnosed as transverse myelitis, in which blood and spinal fluid Wassermann was negative, but later luetin positive, gave a typical paretic zone reaction. While this diagnosis is not yet cleared up, still evidence is

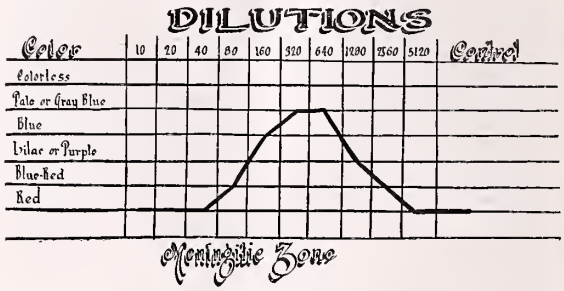

CHART 3. Meningitic Zone.

now tending to show that the colloidal gold reaction gave the first evidence of a paresis, before clinical symptoms appeared to justify, or even suggest, such diagnosis. Two other cases clinically diagnosed as paresis gave typical reactions.

Four cases of lues gave typical Luetic Zone reactions. Diagnosis in these cases was confirmed by positive Wassermann in either blood or spinal fluid.

Two cases gave rather peculiar reactions. One, a case of spastic paraplegia, gave a reaction going to a purple in dilutions of 1-40, 1-80 and 1-160. A Wassermann in the spinal fluid in this case gave a slight binding with a cholestrinised antigen using .4 c. c. of the spinal fluid. This fluid showed negative globulin, reduced Fehling's solution, and no cells could be found.

The other case was one clinically of meningitis. In this case the collodial gold test showed a peculiar precipitation in the first four tubes, which, however, showed a distinct pinkish turbidity in the supernatent fluid (Chart 4.) Miller and Levy, in an article in the *Johns Hopkins Bulletin,* for May, 1914, mention two

similar reactions in cases of meningitis. This spinal fluid gave a strong positive complement fixation reaction, a positive globulin, a cell count of 60 and reduced Fehling's, so the diagnosis of syphilitic pachymeningitis is justifiable.

One of the cases that gave a positive syphilitic curve, had showed just previously a nega-

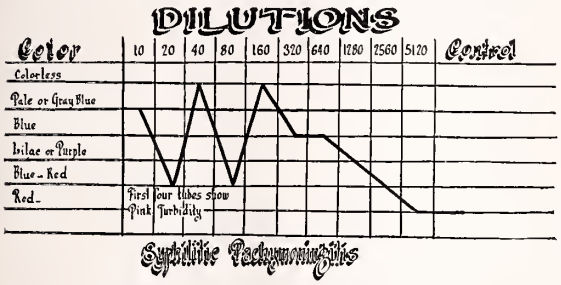

CHART 4. Syphilitic Pachymeningitis.

tive Wassermann reaction, and the colloidal gold reaction was the first positive indication of the existence of lues that we obtained. Subsequently, after provocative treatment, positive blood and spinal fluid Wassermann's and also luetin reaction, were obtained.

So far as I have been able to study the literature of this subject, there has been uniform testimony as to the value of this reaction in the diagnosis of paresis, the reaction being positive in 100 per cent of cases. An occasional case showing a positive paresis curve in other conditions is met with, but these are infrequent. In cerebro-spinal syphilis and tabes, the reaction is positive in about 90 per cent of the cases. In secondary, tertiary and congenital syphilis, about 45 per cent show a positive curve. In meningitis the curve is nearly uniformly typical, but the different forms of meningitis do not show typically different reactions, so that the only conclusion to be drawn is the existence of a meningitis.

The reaction does not depend upon the presence of globulin, as it is sometimes positive where globulin is absent and negative when globulin is present.

One of the attractive features of the colloidal gold reaction, in my opinion, is its value as a prognostic test. I personally believe that where an individual has been suffering from lues for a number of years and then shows a negative colloidal gold reaction, or at the most a luetic curve, he may be reasonably assured that he is safe from paresis or tabes.

I think the time is coming when no physician will discharge as cured a case of syphilis until the cerebro-spinal fluid has been examined by the Wassermann technic, the colloidal gold test, as well as the other reactions that can be applied to this fluid.

The colloidal gold is a very valuable addition to our laboratory tests, but the same rules must

TABLE OF RESULTS WITH COLLOIDAL GOLD TEST.

POSITIVE CASES.

NO.	CLINICAL DIAGNOSIS	BLOOD WASSERM.	WASS.	SPINAL FLUID		FEH.	CELLS
				COLLOIDAL GOLD	GLOB.		
1	Trans. myelitis	Neg.	Neg.	Paretic	Pos.	R.	26
2	Lues, latent	++++	Neg.	Luetic	Not done	Not done	
3	Lues, 2nd	++	+*	Luetic	Neg.	R.	64
4	Paresis	Not done	Neg.	Paretic	Not done	Not done	
5	Paresis	Not done	Neg.	Paretic	Not done	Not done	
6	Lues	+++*	+*	Luetic	Not done	Not done	None
7	Luetic pachy-men.	+	++++	Atyp. Meningitic	Pos.	R.	60
8	Lues, 2nd	Not done	Neg.	Luetic	Not done	Not done	
9	Spastic paraplegia	Not done	Neg.	Atypical luetic	Neg.	R.	None

NEGATIVE CASES

10	?	+	Neg.	Neg.	Neg.	R.	6
11	?	Not done	Neg.	Neg.	Neg.	R.	4
12	Mental degenerate	Not done	Neg.	Neg.	Not done	Not done	
13	Paranoiac	Not done	Neg.	Neg.	Not done	Not done	
14	Mental degenerate	Not done	Neg.	Neg.	Not done	Not done	
15	Aneurism.	Neg.	Neg.	Neg.	Neg.	R.	None
16	Criminal	Not done	Neg.	Neg.	Not done	Not done	
17	Epilepsy	Neg.	Neg.	Neg.	Neg.	R.	None
18	Lues, 2nd	Neg.	Neg.	Neg.	Not done	Not done	
19	Lues, treated 2nd	+++	Neg.	Neg.	Neg.	R.	6
20	Lues, treated, §	Neg.	Neg.	Neg.	Neg.	R.	None
21	Nephritis	Not done	Neg.	Neg.	Not done	Not done	

*Positive Wasserman obtained after provocative treatment.
§Diagnosis based on positive luetin test; had suffered from convulsions.
The R. under Feh. shows reduction of a diluted Fehling's solution.

be applied as in other laboratory procedures. It is not well to rely on laboratory tests entirely. A clinician can only see how far the results of all reactions applied will fit his conception of the clinical entity of the disease in question, and then use some judgment. Still, one may be allowed one little squeak of remonstrance, and that is, some physicians reject the laboratory diagnosis because it does not fit in with their preconceived opinions; and just once in a while, a very great while of course, the clinician is wrong.

In conclusion, I desire to thank both Dr. J. B. York and Dr. C. C. Lechenger of Houston, for their interest and assistance. Dr. York supplied me with many of my spinal fluids, from cases of insanity confined in the jail, and Dr. Lechenger did some spinal punctures for me, and furnished some cerebro-spinal fluid from his own cases.

SYPHILIS AND THE SPINAL FLUID.*

BY

JAMES J. TERRILL, M. D.,

TEMPLE, TEXAS.

The subject of this address is not chosen because I have any particular first hand knowledge of it, but because it is one which I regard as of great importance; it is of great interest to me, and I am sure should occupy much of the time of those interested in clinical medicine and on the laboratory side. If one can judge from the number of articles and references to the matter in the recent medical publications, the effects of syphilis on the spinal fluid is beginning to receive the attention which is its due. It is not my purpose to leisurely traverse the alluring fields of speculation as to the origin of the cerebro-spinal fluid, its absorption, its circulation, but rather to confine myself to those things which one may reasonably expect to find upon examination of the spinal fluid and somewhat as to the interpretation of some of those findings as related to the great scourge, syphilis.

I have never yet come to regard the spinal puncture as a small matter, unattended with danger, nor do I believe that it should be indiscriminately recommended; yet there are numbers of cases in which it is not only justified but really demanded, if we are to give our patients the benefit of all that the science of medicine has for them in the way of diagnosis and prognosis, aside from the matter of treatment. The technique, indications and contraindications, we will have to leave untouched and proceed at once to the discussion of the matter at hand.

*Chairman's Address, Section on Pathology, State Medical Association of Texas, Fort Worth, May 6, 1915.

Of what does a spinal fluid examination in relation to syphilis consist? Briefly outlined, it seems to me to be as follows:

(A) Record pressure, color, clearness, amount removed.

(B) Cultures, if necessary.

(C) Cell count.
  1. Numerical, with some kind of counting chamber, preferably the Fuchs-Rosenthal chamber.
  2. The differential count with stained slide, looking also for bacteria.

(D) Protein content estimation by,
  1. Noguchi butyric acid method;
  2. Kaplan method;
  3. Nonne-Apelt method;
  4. Boiling with acetic acid;
  5. Quantitative estimation with acetic acid and potassium ferrocyanide.

(E) Lange's colloidal gold reaction.

(F) Reduction of Fehling's solution.

(G) Wassermann reaction.

All of this may be done with about 6 c. c. of spinal fluid; an additional 5 c. c. of fluid is needed for quantitative estimation with the ferrocyanide, making a total amount needed of 11 c. c. In practically every adult this amount can safely be removed without harm.

Byrnes of Philadelphia, gives the following suggested classification of syphilis as affecting the cerebro-spinal system:

(1) Syphilitic meningitis, secondary and tertiary.

(2) Cerebro-spinal syphilis, including all specific affections in which the nervous tissue is directly affected, such as meningo-myelitis, gummatous infiltration, general paresis and tabes dorsalis.

(3) Cerebro-spinal syphilitic arteritis.

In considering the possibilities of an early involvement of the central nervous system in such a manner as to bring about recognizable changes in the spinal fluid, attention is called to the recent work of Wile and Stokes on the nervous involvement in the primary stages and in the early secondary stages, in which they state that from 60 to 70 per cent of all cases which progress to the secondary stage show some change in the spinal fluid indicative of the participation of the nervous system. They believe that practically all cases of secondary syphilis have an involvement of the central nervous system; that if there is no change in the fluid it is because the nervous tissue proper and not the meninges are involved. These manifestations may be rather fleeting and mild or they may be very severe and serious, not yielding themselves to even vigorous treatment. Now,

during the widespread distribution of the treponema by the blood, it is reasonable to suppose that the brain and cord must receive their due share. That some cases will later develop a tabes, a general paresis or the more frank manifestations of cerebral syphilis, must be due either to an infection with a special strain of treponema which has a selective power for nervous tissue, or to the nervous tissue of that particular patient being especially susceptible. More and more syphilologists are coming to lay stress upon the former of these two positions, that there are various strains of the treponema which have a special selective power for certain organs or tissues of the body, and that upon these they do their most damage. If this be true, then, it must be that it is determined at the very time of the infection whether there is any great likelihood of a later serious involvement of the central nervous system. Now, since these strains are as yet more or less theoretical and we possess no certain way of differentiating them, it will be of some little prognostic value to do a spinal puncture on these early cases to determine whether there be any recognizable changes in the fluid as yet. In this connection, it must be kept in mind that spinal punctures, as we now do them, do not always give us reliable material upon which to conduct the laboratory investigations. Repeated punctures in cases reveal the fact that the cell count and the protein content are not constant, even in the absence of any treatment.

In the consideration of the individual diseases or phases of syphilis of the cerebro-spinal system, a few general observations must be made. First, the number of cells present as well as the amount of the protein content, seems to depend upon the extent and severity of the involvement of the meninges. Therefore, if the nervous tissue alone is involved we may have a very severe case with slight, if any, change in the spinal fluid findings. Again, definite, well defined clinical cases of one or other of these conditions may not give the findings which we are taught to regard are more or less characteristic.

In regard to what is clinically usually known as cerebral or cerebro-spinal syphilis, the cell count is not usually much above the normal, which should be about from 5 to 7 cells per cu. mm. The protein is not increased and the spinal Wassermann is usually negative. However, the blood Wassermann is practically always positive in these patients and proper treatment usually brings about early and decided relief of symptoms unless the case has progressed to definite destruction of nervous tissue. No amount of treatment can be expected to make this good. All we can hope for is the arrest of the progress of the condition. The reason for the negative spinal Wassermann seems to be that we have the involvement of the nervous tissue chiefly, especially of the brain. The antibodies or what Kaplan calls the reagins, do not reach the ventricular or cerebral fluid and if they do they do not diffuse to a very great degree to the spinal portion of the fluid, and it is the latter which is withdrawn for the examination. Thus we may have little or no representation of the cerebral fluid in it.

In considering the changes in tabes dorsalis, we must do so in about three stages, remembering that there is no hard and fast line of demarcation between them and that the spinal fluid changes may not keep pace with the clinical changes, or they may seem to outrun the latter. In the early or pre-tabetic stage, the blood Wassermann is nearly always negative; the spinal Wassermann is positive in about half the cases; the protein content is normal, and the number of cells is very little increased and may be normal. There is nothing characteristic about the Lange gold reaction. In the active stage, showing the typical symptoms, the blood and spinal Wassermann's are positive in the greater number of cases; the cell count, as a rule, runs up to about 40 or 50, in some cases very much higher, even to 300 or 400; the protein content is somewhat increased. In the declining case, the blood Wassermann is often positive while the spinal Wassermann is negative, and the cell count and protein may be and often are, normal.

In general paresis, where the case is well established, practically 100 per cent will give a positive blood Wassermann, and about 90 per cent a positive spinal Wassermann. There is rarely very much pleocytosis, the rule being to have a low cell count; nor is the protein content increased in most cases. In the tabo-paresis and in certain cases of general paresis, the spinal Wassermann is very persistent and resists treatment, the so-called Wassermann—fast variety. Various interpretations have been put upon this condition, but the most reasonable, it seems to me, is that we still have active process somewhere inaccessible to the drug used, which is constantly furnishing the "reagins" to the fluid. This condition is at times found in the blood Wassermann's of other forms of syphilis than the nervous. It is in the diagnosis of general paresis that the Lange gold reaction seems to give the most characteristic curve.

Certain types of cerebro-spinal involvement present very much mixed-up clinical symptoms, and in these cases the spinal fluid examination may be of service in clearing up the exact diagnosis.

In conclusion, let me say that this subject has been presented today more with the hope of stimulating further work along these lines, so that more data may be accumulated which

will serve to clear up many points now obscure, and to settle some of the disputed questions about cerebro-spinal involvement in syphilis.

THE INTRASPINOUS USE OF SALVARSANIZED SERUM.*

BY

WILMER L. ALLISON, M. D.,

FORT WORTH, TEXAS.

This paper is limited to cases of paresis and cerebral syphilis, and tabes will not be considered, though our experience in these particular forms of syphilis has been equally gratifying.

It is but a short time since paresis was looked upon as a hopelessly incurable disease, there being only a few cases reported in the literature; and there was some doubt about the diagnosis in these.

It is only since the perfection of the Wassermann reaction and its positive findings in paresis, that we have become fully convinced that tabes and paresis are syphilitic diseases and not para- or meta-syphilitic.

The question has been raised, that possibly there are different strains of the Spirocheta pallida, and that a certain strain has the particular power of producing paresis. Whether this is true or not we do not know, but we do know that most cases of paresis are preceded by mild primary and secondary manifestations, often so mild as to be overlooked. It is probably true that these mild cases receive but little, if any, treatment and therefore become malignant later, while the severe primary and secondary manifestations receive sufficient treatment to bring about a recovery, or at least to prevent malignant brain symptoms from arising later.

It has been only a short time since various observers began to find the spirochetes uniformly in the brain of paretics and the cord of tabetics. Today we know that these diseases are not only due to syphilis, but are syphilis, in its active state.

The treatment, therefore, is obvious—we must rid the patient of the syphilis; and his recovery will be in proportion to the amount of organic change that has already taken place in the brain or cord. Since there is no regeneration of brain or cord tissue, we cannot hope to relieve the patient of symptoms due to these changes.

There was a time when we believed that the paretic's symptoms were always due to organic changes; we now know that many of the symptoms may be present where no organic changes have taken place. In other words, they are probably due to the effects of the presence of the organisms or their toxines.

There is no question but that we see what appear to be well advanced cases of paresis with disturbances of speech, gait, reflexes and marked delusions of grandeur, in which there are little if any organic changes.

We had never had a remedy that offered any hope for the paretic, so when salvarsan was discovered our hopes for the paretic rose. In a few months they fell again, for while some few seemed to be benefitted they did not entirely recover. Cases of cerebral syphilis, however, yielded nicely to the intravenous treatment, and seemed to make perfect recoveries. But it was soon learned that the cerebro-spinal fluid contained but little if any arsenic after an intravenous dose. Various observers differ as to this, some stating that none can be found, while others hold that small amounts can be found.

Flexner and others demonstrated beyond a doubt that diseases affecting the meninges and adjacent nerve tissues, cannot be controlled except by subarachnoid therapy; and it has been shown that when trepan blue is injected intravenously, subcutaneously or intra-muscularly, there is but little staining of the meninges, and no staining of the deeper brain tissues, while there is considerable penetration of the deeper brain tissues when trepan blue is given intraspinously. However, it was soon demonstrated that salvarsan could not be safely given in the spinal canal, no matter in what dilution.

Then it was that Swift and Ellis worked out the method of first giving salvarsan intravenously, and later withdrawing the blood and making a serum from it which could be safely given in the spinal canal. Since then, others have mixed the salvarsan solution with the serum outside the body and given it intraspinously, with good results. In this way probably four times the amount of salvarsan can be safely given than by the method of Swift and Ellis.

Many reports from many observers give a very encouraging outlook for the future treatment of paresis, there being probably only one observer to discredit both the theory and practice. However, many cases have been reported as recovered in which the time elapsed since recovery has been too short to demonstrate a cure. There has been but little parallel between the clinical results and the spinal fluid findings—many cases being clinically recovered with but little improvement in the spinal fluid findings.

We have also used the technic of Ogilvie, mixing the salvarsan solution with the patient's own serum outside the body, warming it to body temperature and then giving it intraspinously. In this way the intraspinous dose can be regu-

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*Read before the Section on Medicine and Diseases of Children, State Medical Association of Texas, Fort Worth, May 6, 1915.

lated exactly and a much larger quantity can be given than by the method of Swift and Ellis.

So far we have given one milligram at a dose in this way, thirty-three times, with no more after-effects than by the technic of Swift and Ellis, exeept in one case, which had retention of the urine for two or three days.

We have also combined the method of Swift and Ellis and Ogilvie, by giving an intravenous dose before getting the serum and adding a milligram of salvarsan solution to this serum after withdrawal. This we have tried eight times with no more bad after-effects than by any other technic, except in one case which had retention of the urine for several days. It would seem, if it is the arsenic in the spinal canal which brings about the patient's reeovery, that by destroying the spirochetes those patients would do better who receive the largest doses of arsenic. This, however, does not seem to be the case and it has been our experience that the results obtained by the Swift-Ellis method were probably better than by the other methods. However, it is probably only a matter of time until the proper method will have been worked out and our knowledge of how to treat these cases be made more definite.

It has been our plan to give the first dose intravenously only, and then follow the subsequent doses by the intraspinous dose also, giving one dose each week and continuing the treatment, unless otherwise contra-indicated, until the patient gets well or shows that he is not going to get well.

Every case treated has shown marked evidence of improvement clinically, though they have not all recovered. It is our plan to follow these cases for a year or two with Wassermann's at intervals, and watching the clinical symptoms, giving further treatment when indicated by a positive Wassermann or by the return of the clinical symptoms. In this way, we believe serious relapses can be prevented and frequently the recovery of the patient brought about.

There were no severe reactions or bad effects following the intravenous doses, and with the two exceptions above noted there were no bad reactions following the intraspinous doses, with the exception of three which were followed by severe leg pains, lasting from two to four hours, following which there was no further trouble.

As to whether the good effect is due entirely to the salvarsan, or to some substance formed in the blood acted upon by the salvarsan, has not been determined. At any rate, we are evidently on the right track, and when the technique is perfected, and our knowledge of the right time, frequency and quantity of the drug to be administered becomes established, we will undoubtedly have learned how to bring about the recovery in the majority of the cases of one more dreaded disease, which has not only taken the lives of many of our most useful citizens, but has kept them for months and even years in a condition worse than death.

In order to prevent this paper from becoming too long, the following cases are not reported in detail. I feel absolutely certain that these were cases of paresis and have eliminated from the report cases of cerebral syphilis and to us doubtful cases of paresis.

Case 1.—Male, age 40. Seen in May, 1914. Syphilis 16 or 18 years ago. Mental symptoms of a month's duration and very bad. Received 10 doses of salvarsan. Recovery in 5 months apparently perfect. Wassermann 1 month later was negative.

Case 2.—Male, age 43. Seen in May, 1914. Denied having syphilis. Mental symptoms dated back one year, with a period of intermission; very bad mentally. Received 6 doses of salvarsan. Recovery in 5 months, apparently perfect. Wassermann 1 month later was negative.

Case 3.—Male, age 33. Seen in the spring of 1914. History of syphilis 9 or 10 years previous. Mental symptoms began about a year previous, but much worse in the last few weeks; now apparently demented. Received 8 doses salvarsan. Recovery apparently perfect.

Case 4.—Male, age 41. Seen in April. A hard drinker and had had syphilis 18 years previous. Mental breakdown dated back one month and his mind was almost blank. Received 8 doses of salvarsan. Recovery in 3 months, apparently perfect. Wassermann one month later positive, and he received 2 more doses. He returned 3 months later in a despondent mental state and is now taking more treatment.

Case 5.—Male, age 45. Seen in May. Denied syphilitic history. Mental symptoms of a marked character dated back some 4 or 5 months. Received 8 doses of salvarsan and apparently recovered in three months, mentally, but died a month later of uremia.

Case 6.—Male, age 42. Seen in March. History of syphilis 12 years ago. Mental symptoms dated back only a few weeks. Mental condition very bad; violent. Received 9 doses of salvarsan and after 4 months was taken home. Was quiet and well behaved but at times would make remarks showing him not to be well.

Case 7.—Male, age 40. Seen in October. Denied syphilis but Wassermann was very positive. Mental breakdown dated back several weeks. Violent and mental condition so bad he could not form a clear sentence. He received 8 doses of salvarsan and is apparently well mentally and physically.

Case 8.—Male, age about 45. Seen in September, 1913. Diagnosis was made before by another physician, and confirmed by us. Mental symptoms dated back several weeks. Mental condition bad, no memory, delusions of grandeur, etc. Received 13 doses of salvarsan and in 7 months was apparently well. Wassermann 4 months later was slightly positive and he was given two more doses. In November, he seemed to be getting off again and was given 3 more doses. He is now at home doing well.

PHENOLAX WAFERS.—These are tablets said to contain phenolphthalein 1 gr., "aromatics" and sugar, enough to make five grains. It is a question what purpose the "aromatics" and sugar serve, perhaps these are to mislead the unthinking to believe that this combination has some mysterious value over phenolphthalein itself. (*Jour. A. M. A.*, October 17, 1914).

DEPARTMENT OF EXTENSION

Some of the articles to appear in this department are adapted for publication in the lay press but not particularly suitable for distribution by the physician. The articles in the August JOURNAL on fly larvae are of this class. Conversely, some of the articles are designed to be handed by the physician to the patient suffering from the given disease. The article below on syphilis is of this class. In general, the articles dealing with certain diseases will be found satisfactory for distribution by the physician himself. These articles may or may not be valuable also for the lay newspapers.

We have a few reprints of the articles on typhoid and syphilis which will be sent to our readers free on request. Enclose postage.

PREVENTION OF SPREAD OF CONTAGIOUS BLOOD POISON (SYPHILIS).

Syphilis can be cured. It is a disease that may affect any part of the body. It may be transmitted to the next generation, and it may be transmitted to other persons. But it promptly yields to treatment when the patient faithfully carries out the physician's instructions.

Syphilis is caused by a germ of spiral form, which enters the skin through a small abrasion or fissure, causing at the point of entrance a sore called a chancre. This is usually situated on the genital organs, less frequently on the hand or lip. About six weeks, or longer, after the appearance of the sore, a rash may appear on the skin of the body. During these first two stages of the disease, it is very infectious, and precautions should be rigidly observed to avoid transmission to others.

Fortunately, the germ of syphilis is not very hardy and dies if dried or washed; hence, syphilis is not easily transmitted except by immediate contact, as in sexual intercourse, kissing, etc. Rarely one might catch the disease by drinking from a cup or using a dirty towel, immediately after a syphilitic.

No man is justified in believing he has syphilis unless he positively knows the one diagnosing the case to be a reputable physician. This is entirely too grave a question to be left to any advertising specialist, traveling doctor, or doctor who treats by mail. A patient who fears he has syphilis should go to a physician whom he knows to be an honorable and competent person.

Having consulted such a physician, instructions as to treatment should be followed to the letter. The physician should especially be allowed to give any medicine he desires, by mouth, by inunction, by injecting into the arm, or in any way he thinks best in the given case. The physician should be allowed all the time he needs to complete the cure, and if he thinks blood tests are needed, they should be allowed.

To prevent the spread of the disease to others, the syphilitic should avoid sexual intercourse, except under the precautions directed by the physician. He should use individual eating utensils, which should be boiled after using. He should use an individual towel; and especially during the first and second stage should he avoid kissing persons on the mouth.

The syphilitic will hear many stories of the incurability of the disease. Failure to cure, however, is usually due to carelessness and neglect of the doctor's instructions. Thousands of syphilitics have been cured and had healthy wives and children. The syphilitic, however, should never consider himself well, merely because he feels well, and the symptoms of the disease have disappeared. He should not, under any circumstances, quit treatment or get married until advised by a reliable physician that such a course is reasonably safe. The man who disobeys this advice may transmit the disease to a wife, causing an unsightly and some times fatal disease; he may beget deformed, idiotic or paralyzed children, or he may himself die of insanity and sores.

The intelligent patient, however, who faithfully carries out his physician's instructions, will probably be relieved of his symptoms within a few days or weeks, and will eventually be as sound as he was before. There is no other serious disease over which medical science has such power as over syphilis. There is no other disease more treacherous, apparently cured at times yet really still lurking in some hidden spot. There is no disease which so well repays the patient for religiously obeying the directions of his physician.

THE PREVENTION OF TRACHOMA.

Trachoma, also called "granulated lids," is a chronic, contagious disease which affects the lining of the eyelids. It causes an inflammation of the conjunctival membranes, and usually lasts for months or years. In this respect, it differs from ordinary contagious conjunctivitis or "pink eye." Trachoma may, however, at times set up a sudden, acute inflammation which can be distinguished from other acute diseases of the eye only by a physician.

Surgeons of the United States Public Health Service are stationed at all our seaports for the purpose of detecting immigrants with trachoma and turning them back to the country whence they came. There is a certain amount of trachoma, however, throughout practically all of the United States. In many communities, a considerable proportion of the school children are affected. No community can consider itself secure from the disease.

Acute cases of trachoma may show redness of the eyes and swelling of the lids, with a watery or purulent discharge. Chronic cases do not always cause conspicuous symptoms; the sensation of roughness under the lids is frequently absent. Pain and inconvenience are not the worse features of trachoma; if allowed to advance unchecked, the disease may cause scars which, like all scars, tend after a while to shrink or contract. The shrinkage of the tissues lining the lids can be controlled or prevented by proper treatment. To avoid disaster, such treatment is imperative.

The disease is spread by the secretion or fluid dicharged from a diseased eye. This discharge may be carried in many ways from the eye of a diseased person to the eye of a well person. Fingers, towels and handkerchiefs, are of the greatest importance, although at certain seasons flies and gnats sometimes alight on the eyes of children and thus spread the disease. Children should be taught to avoid other children with "sore eyes," and to avoid certain habits, such as lending or borrowing handkerchiefs, using public towels, or handling any article that has been in the hands of a person with "sore eyes."

Parents should select with care a school for their children to attend, and should encourage medical inspection of schools at proper intervals. Parents should bear in mind the danger of having glasses fitted to children's eyes by irresponsible parties, who might overlook the early signs of trachoma or other disease. Only a competent physician or oculist, is capable of diagnosing trachoma.

"AS TO MEDICAL FREEDOM."

The Lamar *Democrat* is published in Lamar, Mo., once a week. What follows is from an editorial that appeared in the issue of June 10, 1915. Those who

read it will realize why it is unnecessary to make any comment:

Every week we read a journal that is devoted quite hotly to medical freedom. Judging from what this seven-day periodical of enlightenment has to say, we are in great danger of a vast medical trust, that will sit heavily and ruthlessly upon us, poisoning us with deadly serums and vaccines, gagging us with nauseous decoctions of mephitic herbs.

Is there really anything the matter with our present medical freedom in this country? Is there any damn fool "ism," any absurd claim, any sort of "Eny, Meny, Miney, Mo" business that we cannot try upon our diseased and tortured bodies if we are so minded?

Truth compels us to answer, None.

Consider for a minute what has been done by the regular school of medicine against which, in the name of freedom, we are so vociferously and so repeatedly warned. Then consider the achievements of the various schools, cults, 'isms and creeds that would supplant this profession and consign it to forgetfulness.

The regular school of medicine is fallible. There are many things it cannot do. But it never ceases in its search for truth. The laboratory and the clinic room are its foundation and inspiration. Nothing is taken for granted. It bases its deductions upon scientific facts, that must overcome the combined force of prejudice, tradition and vested interest.

What has become of cholera? What has become of infant diarrhea? What has become of smallpox, once a terror equal to plague? What has become of diphtheria and membranous croup? Who is gradually conquering tuberculosis, the greatest of human plagues? Who has dissipated the dread specter of hydrophobia? Who achieved the marvels of modern surgery? Has it not been the school of regular medicine? One by one, hostile schools of healing have been reared to combat the ancient profession of Hippocrates. Where are they now? Only echo answers, Where?

Who is frantically and supplicatingly in demand upon those long battle lines in Europe? Is it chiropractics? Is it osteopaths? Is it Christian Science healers?

Those who seek to overthrow the regular practitioners found their assumptions upon a combination of supersitition, and a wooden-faced denial of physical facts. They come and go like the passing seasons. They make no great scientific discoveries. They garner no tomes of physical knowledge. They are found in the end to be based upon pretence, gullibility, superstition and esoteric moonshine.

The regular school makes mistakes. It needs watching. It should never emerge to that haughty eminence where it will not receive its full quota of brain-clearing, humility-preserving kicks; but forget not, brethren, it is the salt of the earth, and suffering humanity's one dim and distant star of hope.—*The Journal of the American Medical Association.*

THE WORKING OF THE LEAVEN.

Under the title, "Medicine Man Quits With $1,000,000," the Brazil, (Ind.) *News* for August 5, prints an interesting news item. Here it is:

"Kokomo, August 5.—The Cora B. Miller Medicine Company, known over the country because of its extensive magazine advertisements of a cure for the complaints of women, today discharged its small army of stenographers and other employees and then closed its doors to business. The closing came as the result of a fraud order issued recently by the Postoffice Department, which denied the use of the mails to the circular advertising matter of the company.

"According to Dr. Frank Miller, who started the business twenty-five years ago, when he was practically penniless, the company will never again do business. Miller is now worth from $900,000 to $1,000,000.

"For the first twenty years of the business, there was no interruption, and the money poured into the coffers of the company from women of the country. Four years ago, however, the government took exception to the use of the name Cora B. Miller in connection with the advertising, inasmuch as Mrs. Miller had no connection with the company, and the firm was forced to change names.

"The change marked a turning point in the affairs of the company, and when recently the government brought a fraud order against the company, Miller decided to quit the business. Miller is the largest holder of real estate in Kokomo."

The Cora B. Miller fraud was exposed in *The Journal of the American Medical Association* for July 23, 1910, and the matter reprinted and widely circulated in pamphlet form. The newspaper quoted above credits the failure of the Miller concern to the fact that the federal authorities caused it to change its name from "Mrs. Cora B. Miller" to "Miller Medicine Company." That this change probably had something to do with the decline of the business is doubtless true. Another agency, however, has been at work and tended to make the Miller fraud less profitable. A good many thousand reprints of *The Journal's* exposé have been circulated. The public generally, and especially the feminine part of it, has been wholesomely awakened to the wretched swindles that have been, and still are, perpetrated on it by "patent medicine" fakers. The American Medical Association, therefore, may certainly take some of the credit for bringing about the consummation that resulted in Miller retiring from his fraudulent trade. And here we have one more explanation of the fact that certain individuals froth at the mouth whenever the American Medical Association and *The Journal* are mentioned.

DANGER IN FACE POWDER.

Some preparations of face powder are the cause of inflammation of the eyes. This form of inflammation occurs—from obvious reasons—almost exclusively in women. They will complain that the vision is blurred; that they cannot read or sew for any length of time; that the lids burn and itch, sometimes intolerably, and that rubbing the lids only aggravates the itching. The reason for this is that many of these toilet powders, commonly known as "rice powder" or "Poudre de Riz" contain, in addition to the rice powder, other ingredients which irritate the delicate membranes of the eye. Sixteen samples of so-called rice powders were recently analyzed, and of this number only two consisted entirely of rice; and only six contained any rice at all. Women who are accustomed to using face powder should be careful to select only those preparations which are known to be pure, and free from harmful substitutes. In applying powder to the face, it is much safer to use a cloth and rub the powder on the skin, rather than to apply it with a puff, as by the latter method the powder is driven upward and lodges on the moist eye-ball. The tears change it into a mucilaginous substance which lodges behind the eye-lids, and produces the symptoms complained of. Since toilet articles do not come under the federal and state food and drug acts, they can easily be adulterated. Rice flour purchased at a grocery would, says *The Journal of the American Medical Association,* remove this particular danger.

MISCELLANEOUS.

THE TEXAS STATE BOARD OF MEDICAL EXAMINERS.

We are pleased to present herewith a very excellent likeness of the several members of the present Board of Medical Examiners, many of whom are well known to the profession throughout the State.

The following brief summary of the personal history of the members of the Board, may be of interest:

Dr. H. B. Mason, Temple, was born in Memphis, Missouri, thirty-two years ago. He is a graduate of the high school and the State Normal School of Kirksville, Missouri. He is an osteopathic physician, graduating from the American School of Osteopathy at Kirksville, in 1907. He came to Texas immediately following his graduation, and associated himself with the Norwood Sanitarium in Mineral Wells. He remained with this institution one year, removing to Temple, where he has practiced his profession continuously until the present time. He is an original Ferguson man, a Mason of high degree and an Elk.

Dr. J. J. Williams, Groesbeck, was born December 5th, 1869, in Russell County, Alabama. He removed to Limestone County, Texas, at the early age of eleven years, and was very soon thereafter left an orphan. He graduated in the high school at the age of seventeen, and became a teacher in the public schools of the State, which vocation he followed until 1895. At that time he entered the Medical Department of Tulane University, graduating in 1898. He practiced in Hubbard City for five years, immediately following his graduation, removing from there to Groesbeck, his present home. He served his community as health officer for ten years. He has taken frequent post-graduate work in the clinics of New York and New Orleans.

Dr. S. L. Scothorne, Dallas, was born on a farm near Columbus, Ohio, July 27th, 1880. He attended the public schools of his community and is a graduate of the Ohio Northern University at Ada, Ohio. He taught school for five years, subsequent to his graduation from this institution. He is an osteopathic physician, graduating from the American School of Osteopathy, at Kirksville, Missouri, in 1908. He located in Dallas immediately following his graduation, where he has practiced his profession until the present time. He is a past president of the Texas Osteopathic Association, and a member of the National Osteopathic Association. He was originally appointed to the State Board by Governor Colquitt, in 1912, receiving reappointment at the hands of Governor Ferguson. He is a member of the Iota Tau Sigma Fraternity, and is an Elk and a Mason of high degree.

Members of the New State Board of Medical Examiners.

Top row, left to right: Drs. H. B. Mason, J. J. William , S. L. Scothorne, J. H. McLean. Center row: Drs. M. F. Bettencourt, T. J. Crowe, M. P. McElhannon. Bottom row: Drs. H. C. Morrow, John S. McCelvey, M. A. Cooper, W. C. Swain.

Dr. J. H. McLean, Fort Worth, was born in Mt. Pleasant, Texas, June 11th, 1877. He received his preliminary education in the private and public schools of East Texas, entering the Southwestern Presbyterian University, Clarksville, Tennessee, in 1892. He graduated there in 1896, and began the study of medicine in the Medical Department of Fort Worth University, Fort Worth, in 1896. Winning the highest proficiency prizes during each of the terms, he graduated in 1899. He then entered the Medical Department of Cornell University, New York City, from which institution he was graduated in 1901. Following his graduation here, he applied for an interneship in Bellevue Hospital, in New

York City, winning the appointment in competitive examination with a very large class. He served this institution for two full years, returning to Fort Worth, where he entered the practice of his profession.

Dr. McLean is a member of the Kappa Sigma and Phi Alpha Sigma fraternities; he is also an Elk and a Mason of high degree. He is a member of the county, State and National medical organizations.

Dr. M. F. Bettencourt, Mart, was born in Gracioza, in the Azores or Western Islands, November 1st, 1880. His parents were originally residents of Galveston, Texas. The family eventually returned to Galveston, where they have since resided. Dr. Bettencourt had already received a good education in private schools, in the Portuguese language; he immediately entered the public schools of Galveston, graduating from the Ball High School in 1901. He is an eclectic physician, having received his diploma from the Eclectic Medical College of Cincinnati, Ohio, in 1906. By competitive examination he received appointment as interne to the Seton Hospital of Cincinnati, in which capacity he served for a year. He returned to Galveston and began the practice of his profession at that place. In 1907 he removed to Gladewater, Texas, where he practiced until April, 1910. He removed at this time to Polytechnic Heights, Fort Worth, remaining in this location for two years. In May, 1912, he moved to Mart, where he formed a partnership with his brother-in-law, Dr. Chas. L. Hudson. He is a member of the Texas Eclectic Medical Association, and served as President for a term of two years. He is a Past Chancellor in the Knights of Pythias lodge, a Mason, and holds membership in a number of fraternal orders.

Dr. T. J. Crowe, Dallas, was born at Newark, New York, in 1867. He received his preliminary education in the public schools of New York State, and from private tutors. He was graduated from the Homeopathic Medical College of Missouri in 1887, with the highest honors, receiving two medals for special work done in the year of his graduation. He located in Dallas in 1895, where he has been continuously engaged in the practice of his profession until the present time. He has taken post-graduate work in the New York, Chicago, Baltimore and Philadelphia clinics, both regular and homeopathic.

Dr. M. P. McElhannon, Belton, was born on a farm in Bosque County, Texas, August 17, 1879, near Valley Mills. He received his preliminary education in Valley Mills. He graduated from Vanderbilt University in 1900, serving during his senior year as an assistant to Dr. G. C. Savage of Nashville. He located in Belton in 1901, where he has been continuously engaged in the practice of his profession. He served as county physician of Bell County from 1904 to 1907. He is a member of his County, State and National medical organizations, and has served as president and secretary of his district society. He is the present Secretary-Treasurer of the Board of Medical Examiners.

Dr. H. C. Morrow of Austin, was born and reared in the State of Ohio, receiving his preliminary education in his home State. He received the A. B. degree in the National Normal University, at Lebanon, Ohio, in 1874. He is a homeopathic physician, having graduated from the Pulte Medical College at Cincinnati, in 1878. He is a member of the State, Southern and National Homeopathic organizations, having served in the capacity of President in the former. He was appointed to the Board of Medical Examiners by Governor Colquitt in 1913, and reappointed by Governor Ferguson.

Dr. J. S. McCelvey, Temple, was born in Houston County, Texas, in 1870. He moved with his family to Temple, at the age of thirteen years. He received his preliminary education at home and took three years in the University of Texas. He graduated in medicine in the Jefferson Medical College, Philadelphia, in 1894, and served as interne in the Red Bank Hospital in New Jersey. Following his interneship, he spent thirteen months in post-graduate work in Berlin, following which he served an interneship in the Royal Hospital, Saxony, Germany. He returned to his home in Temple, where he began general practice, gradually drifting into surgery, to which branch of medicine he at the present time confines himself exclusively. He has taken frequent post-graduate work in the clinics of this country.

Dr. M. A. Cooper, Childress, was born in Grayson county, Texas, January 26th, 1880. He received his preliminary education in the public schools of the Panhandle of Texas, taking a course in the meantime in the Lackney Christian College. He is an eclectic physician, graduating from the Eclectic Medical College of Cincinnati, Ohio, in 1906. He began the practice of medicine in Leakey, Texas, immediately subsequent to his graduation. He established the Southwest Texas Sanitarium, in his home town, serving as Resident Superintendent until 1912, when he moved to Childress, his present home. He is a past President of the Texas Eclectic Medical Association. He has taken post-graduate work in New York.

Dr. W. C. Swain, Dallas, was born in New Orleans, Louisiana, but removed to Galveston, Texas, when a small boy. He received his preliminary education in the public schools of Galveston, graduating from the High School. He received his medical education in the Medical Department of the University of Texas, Galveston, from which institution he graduated in 1897. He served an interneship in the John Sealy Hospital, immediately following his graduation, and subsequently began the practice of medicine in Victoria, Texas. He very soon removed to Cuero, from which place he was called to Dallas, to become the Assistant Medical Director of the Southwestern Life Insurance Company. He has taken frequent post-graduate work in the clinics of New York City. He is a member of his local, the State and National medical societies, and has served his county society as president.

QUESTIONS ASKED AT THE JUNE EXAMINATION OF THE TEXAS STATE BOARD OF MEDICAL EXAMINERS.

Anatomy.—(1) Give the location and shape of the frontal bone, and name the bones with which it articulates. (2) What structures are used in the formation of an articulation, and what three classes of articulations are there? (3) Name the triangles of the neck and sub-divisions and give boundaries of each. (4) Describe the diaphram and give origin and insertion. (5) Give location of the subclavian arteries and tell origin of. (6) Give origin and distribution of the pneumogastric nerve. (7) Where does the liver get its blood supply? (8) Give abdominal surface location of the gall bladder and appendix. (9) What constitutes the sympathetic nervous system? (10) Describe and give location of inguinal canal.

Dr. M. A. Cooper.

Physiology.—(1) Define physiology. (2) Name the elementary tissues. (3) Name the kinds of muscular tissue. (4) Describe briefly the blood. (5) What is an "internal secretion?" Name five organs which have such. (6) If the pneumogastric nerves were severed, what would be the effect on the heart? (7) Where are the plexuses of Auerbach

and Meissner located? Their function? (8) Where are the Malpighean bodies found? State their function. (9) Name the organs of execretion, in the order of their importance? (10) Where are the cardio-inhibitory and cardio-accelerator centers located?

DR. M. F. BETTENCOURT.

CHEMISTRY.—(1) What is an element? A compound? Give an example of each. (2) Define a deliquescent salt; an effervescent salt. (3) In Marsh's test for arsenic, how do you differentiate arsenic from antimony spots? (4) Give a process for making chlorine gas. Give properties of chlorine gas. Of what value is this gas? (5) What is an acid? What is a base? Complete $2NaCl + H_2SO_4$. (6) Define normal salt, basic salt, acid salt. (7) Describe iodine as found on the market. Give test for iodine. (8) How is chloral hydrate prepared? Give physical properties of chloral hydrate. (9) From what source do we obtain genuine salicylic acid? (10) Give test for morphine sulphate.

DR. J. J. WILLIAMS.

HISTOLOGY.—(1) Name and describe the membranes of the brain. (2) Give the structure of the human skin. (3) Locate and give structures of Peyer's patches. (4) Give structure of the Thyroid Gland. (5) Give a histological difference between the Pyloric and Cardiac end of the stomach. (6) Give the development of bone. (7) Draw a cross section of the spinal cord at the 10th dorsal, and name the findings. (8) Give histological difference between veins and arteries. (10) Give histological structure of a lymphatic gland.

DR. H. B. MASON.

BACTERIOLOGY.—(1) Describe the Wassermann reaction. (2) Define alexines, agglutinines and precipitins. (3) Define diapedesis and phagocytosis; of what use is the process of phagocytosis in the human system? (4) Name the stains used to demonstrate the presence of the following micro-organisms: Staphylococcus, streptococcus (of man), the negri bodies of hydrophobia. (5) State methods of making a culture of the following: Klebs-Loeffler bacillus. (6) Define toxins, endotoxins and autotoxins. (7) Give morphology of pneumococcus and the parasite of malaria (any variety). (8) Describe the Widal reaction and Von Pirquet's method of cutaneous diagnosis of tuberculosis. (9) What pus producing micro-organism causes the greatest mortality; give names of principal diseases in which it is a principal of destruction. (10) Define flagellated, and name all the flagellated pathogenic organisms.

DR. H. C. MORROW.

OBSTETRICS.—(1) Give the symptoms and management of puerperal infection. (2) Give the blood supply of the uterus. (3) What are the changes that take place in the circulatory apparatus of the fetus after birth? (4) Give differential diagnosis between uterine fibroma and pregnancy. (5) Give indications for the use of forceps and for caesarean section. (6) Give the hygiene of pregnancy. (7) Name three of the most frequent diseases to which pregnancy predisposes; select one and give symptoms of same. (8) Give three indications for induction of premature labor, and describe one method of performing the same. (9) Give the proper treatment of ophthalmia neonatorum. (10) Give the definition of premature labor and abortion.

DR. M. P. MCELHANNON.

GYNECOLOGY.—(1) Outline your scheme for taking a gynecologic history. (2) What are the advantages and disadvantages of Pfannenstiel's incision? Enumerate, in the order of their importance, the causes of metrorrhagia. (3) Describe a standard perineorrhapy (secondary). (4) What precautions should be taken in making a vaginal examination of a virgin. (5) A married woman, aged 40 years, with one child aged 14 years, and no subsequent pregnancies, is in good health until suddenly seized with violent pain in the left lower abdomen and collapses. Suggest two diagnoses. (6) Criticise ventrofixation and ventro-suspension uteri. (7) What conditions justify double ovariectomy? (8) What surgical procedure would you advise to correct procidentia with cystocele and rectocele, in a woman 50 years of age? (9) Name the contraindications of uterine curettage. (10) Would you leave the appendix, in abdominal operations for other conditions? Reasons for your answer.

DR. J. H. MCLEAN.

PATHOLOGY.—(1) What is a tumor (new growth)? Classify tumors as to the tissues from which they arise. Give examples. (2) What constitutes malignancy? By what channels are metastases carried? (3) Describe the stages of simple inflammation. (4) Describe the pathological process leading to destruction of the valve in mitral insufficiency. (5) Give in detail the blood picture of pernicious anaemia. (6) What systemic pathological changes are usually associated with contracted kidney (interstitial nephritic)? (7) Give the pathological changes in the intestines in typhoid. (8) Describe the gross and microscopic appearance of a gumma of the liver. (9) Describe in detail the pulmonary changes in the various stages of croupous pneumonia. (10) Give pathological changes in amoebic dysentery.

DR. W. C. SWAIN.

PHYSICAL DIAGNOSIS.—(1) What are the methods of Physical Diagnosis? (2) By what symptoms would you diagnose Pott's disease (of the spine)? (3) Give use of Sphygmomanometer. What is blood pressure? (4) State in what diseases we would most likely observe hypertension and hypotension. (5) Describe the characteristics and significance of the several kinds of arterial pulse. (6) Differentiate organic and functional heart murmur. (7) What are the normal sounds obtained by percussion on the thorax. (8) In what disease can we employ the microscope as an aid in diagnosis? (9) What are the physical signs of sciatica? (10) What are the physical signs of pellagra?

DR. S. L. SCOTHORNE.

SURGERY.—(1) Difference between acute abscess and carbuncle; what organisms are usually present in both? (2) Outline preparation of patient for abdominal section, beginning 36 hours beforehand (after treatment). (3) Define acute osteomyelitis; give treatment and differential diagnosis between it and acute rheumatism. (4) Give treatment of simple fracture at junction of upper with middle third of the femur. (5) Give diagnosis of chronic duodenal ulcer. (6) Give what surgical complications may arise in typhoid fever. (7) Give differential diagnosis between tuberculous kidney and stone in kidney. (8) How would you put an old man in best physical condition for removal of prostate? (9) Give treatment of penetrating wound of the right chest. (10) A man receives a blow on top of the head, you are called in and observe him unconscious, and with a scalp wound, how would you handle the case?

DR. J. S. MCCELVEY.

MEDICAL JURISPRUDENCE.—(1) Define Rigor Mortis; say where it commences; how long it lasts, and its importance from a medico-legal standpoint. (2) Differentiate the male and female skeleton. (3) How would you determine whether a stab wound on a dead body was made before or after death? (4) What points would help to determine whether a gunshot wound was self-inflicted? (5) Under

what conditions may pregnancy become a subject of medico-legal inquiry? (6) Under what conditions is the destruction of a living foetus not considered murder? (7) Give the classifications of insanity. (8) In suspected infanticide how would you determine that the child was born alive? (9) In case of doubtful paternity what points would help to fix the responsibility? (10) Upon what evidence could you sustain a charge of recent abortion?

DR. T. J. CROWE.

HYGIENE.—(1) Name some of the diseases believed to be acquired by inhalation of micro-organisms from the air. (2) How much O does an adult human being at rest ordinarily take from the air and how much CO_2 does he add to it in twenty-four hours? How would you arrange for natural ventilation of school room during cold weather? (3) What quantity of water should be supplied per capita, daily, by towns and cities for all purposes? Mention some diseases that are frequently transmitted by water. (4) What is the probable significance of nitrites or nitrates in water? (5) How is milk most frequently adulterated, and what is the greatest danger in such adulteration? (6) What conditions may render meat unfit for food? (7) Of what diseases or disease, is the house fly a carrier? (8) What precaution should be taken in locating the well or cistern, for drinking water, on a farm? (9) What precautions should be taken in the handling of a case of typhoid, to prevent the infection of others (explain fully)? (10) Describe a reliable method for the disinfection of a room which has been occupied by a patient with an infectious disease?

DR. W. C. SWAIN.

RESULTS, JUNE EXAMINATION, STATE BOARD OF MEDICAL EXAMINERS.

The State Board of Medical Examiners issued licenses to practice medicine in the State of Texas to the following applicants, during the regular semi-annual examination, held at Austin, June 22nd, 23rd and 24th, 1915. The reciprocity and verification licenses cover the period since the last semi-annual meeting of the Board, and were issued from time to time by the proper committee of the Board. The two lists follow:

LICENSED BY EXAMINATION, JUNE 22nd, 23rd AND 24th, 1915.

Alexander, J. C.; Univ. of Tenn., 1915; 83%; Garland.
Allen, Wm. L.; T. C. U., 1915; 87%; May.
Anderson, Joseph J.; Vanderbilt, 1915; 92%; Bangs.
Ard, Ben Neal; Baylor, 1915; 81%; Dallas.
Arnold, Carl K.; T. C. U., 1915; 81%; Henrietta.
Barragan, Jose; Nat'l School, 1893; 83%; Brownsville.
Brewer, Frank B.; Vanderbilt, 1915; 81%; Gainesville.
Bledsoe, Jas. A.; Univ. of Louisville, 1915; 81%; Port Arthur.
Bledsoe, R. W. E.; Meharry, 1915; 87%; Tyler.
Brown, Eli E.; Baylor, 1915; 86%; Dallas.
Brown, Harry H., Jr.; Harvard, 1915; 86%; Yoakum.
Bailey, C. O.; Univ. of Tex., 1915; 89%; Quinlan.
Baxter, M. V.; College of O. P. & S., 1915 (D. O.); 84%; Greenville.
Blevins, J. D.; Univ. of Tex., 1915; 84%; Beaumont.
Culpepper, Wm. L.; Tulane Univ., 1915; 92%; Temple.
Carter, Wilbur; Univ. of Tex., 1915; 88%; Whitewright.
Chapman, Wm. G.; Baylor, 1915; 81%; Dallas.
Cookerly, Van; Southern Meth., 1915; 85%; Dallas.
Calaway, F. O.; Univ. of Tex., 1915; 90%; Bowie.
Chapman, L. E.; Univ. of Tex., 1915; 87%; Ennis.
Cayo, Edward A.; Tulane, 1915; 91%; Beeville.
Clements, Edgar B., Jr.; Univ. of Tenn., 1915; 86%; Timpson.
Day, G. W.; T. C. U., 1915; 92%; Fort Worth.
DeLario, Chas. E.; Col. of O. P. & S., 1915 (D. O.); 88%; Los Angeles, Cal.
Dillen, Oscar M.; Univ. of Tenn., 1915; 84%; Timpson.
De Lara, F. A. G.; Nat'l Medical, 1900; 82%; San Antonio.
Fulton, E. V.; St. L. Col. P. & S., 1914; 78%; Denton.
Fowler, F. F.; Vanderbilt, 1915; 88%; Nashville, Tenn.
Fickessen, W. R.; Tulane, 1902; 83%; San Antonio.
Fay, Scott S.; Univ. of Tex., 1915; 86%; Wilsey, Kan.
Francklow, C. D.; T. C. U., 1915; 84%; Shiro
Flett, Eric St. Clair; C. of O. P. & S., 1914 (D. O.); 87%; Los Angeles, Cal.
Griswold, G. W.; Baylor, 1915; 87%; Dallas.
Grant, Brooks C.; Chicago C. of M. & S., 1915; 90%; Fort Worth.
Graham, E. L.; Univ. of Tex., 1915; 83%; McGregor.
Guzman, M. M.; Escuela de Medicina de Monterey, 1899; 78%; San Diego.
Glover, M. H.; Univ of Tex., 1915; 91%; Paducah.
Gordon, T. M.; Baylor, 1915; 84%; Stephenville.
Gerson, G. R.; Tulane, 1915; 89%; Houston.
Gee, Othel J.; Vanderbilt, 1915; 88%; Greenville.
Gough, H. W.; Univ. of Tex., 1915; 85%; Galveston.
Horn, F. W.; T. C. U., 1915; 81%; Fort Worth
Hyde, Ximmie R.; T. C. U., 1915; 86%; Fort Worth.
Hanes, Wm. H.; Baylor, 1915; 92%; Hughes Springs.
Harrison, Frank; Southern Meth., 1915; 93%; Dallas.
Hinde, H. K.; Vanderbilt, 1915; 86%; San Angelo.
Hanson, Wm. S.; Univ. of Tenn., 1915; 92%; San Antonio.
Hull, Louis T.; College of O. P. & S., 1914 (D. O.); 87%; Los Angeles, Cal.
Hoover, M. W.; Am. S. of O., 1915 (D. O.); 82%; Kirksville, Mo.
Hale, Robt. A.; Univ. of Tex., 1915; 89%; Waco.
Hathorn, Mary M.; Am. S. of O., 1914 (D. O.); 90%; Columbia, Miss.
Hearin, W. C.; Tulane, 1910; 82%; Canton.
Harrison, F. E.; Tulane, 1915; 90%; New Orleans, La.
Jenkins, Jno. B.; Vanderbilt, 1915; 84%; Hubbard.
Jay, E. Lee; Am. S. of O., 1914 (D. O.); 84%; Columbia, Miss.
Jacoby, Alfred; Tulane, 1902; 89%; New Orleans, La.
Jackson, N. R.; Vanderbilt, 1915; 91%; Smithwick.
Jennings, T. V.; Tulane, 1915; 86%; Mart.
Kirkpatrick, B. A.; T. C. U., 1915; 85%; Mineral Wells.
Kent, C. M.; Tulane, 1915; 89%; Kilmichael, Miss.
Kee, Jno. L.; Southern Meth., 1915; 90%; Dallas.
Keiller, Violet H.; Univ. of Tex., 1914; 92%; Galveston.
King, M. A.; Baylor, 1915; 87%; Lovelady.
Kopecky, Joseph; Univ. of Tex., 1915; 88%; Taiton.
Kitowski, C. B.; Univ. of Tex., 1915; 91%; Chapel Hill.
Lunsford, W. B.; Vanderbilt, 1913; 88%; Nashville, Tenn.
La Forge, Hershall; Baylor, 1915; 83%; Marble Falls.
Loving, Frank A.; Am. S. of O., 1915 (D. O.); 85%; Sherman.
Lockman, Wade M.; Am. S. of O., 1915 (D. O.); 82%; Kirksville, Mo.
Lowry, R. K.; Univ. of Tex., 1915; 89%; Temple.
Lutner, Thomas R.; Univ. of Tex., 1915; 84%; Galveston.
Lightfoot, W. D.; Univ. of Tex., 1915; 84%; Austin.
Long, W. F.; Univ. of Tenn., 1915; 76%; Sulphur Springs.
Lockhart, J. P.; T. C. U., 1915; 87%; Austin.
Lynch, Kevin D.; Columbia Univ., 1915; 92%; El Paso.
Michel, Beth A.; Baylor, 1915; 93%; Dallas.
McPherson, Jess W.; Los Angeles Col. of O., 1914 (D. O.); 92%; Los Angeles, Cal.
McDougle, John B.; Baylor, 1915; 84%; Dallas.
Moore, Wm. R.; Vanderbilt, 1914; 81%; Carlton.
Miller, Robt. N.; Meharry, 1915; 76%; Liberty Hill.
Moore, M. J.; Vanderbilt, 1915; 83%; Carlton.
Miller, L. Tate; Vanderbilt, 1915; 90%; Corsicana.
Mitchell, H. D.; N. Y. Homo. Col., 1915; 87%; Fort Worth.
Melson, M. C.; Univ. of La., 1885; 75%; El Paso.
McCasland, Clifford; St. L. Col. of P. & S., 1915; 76%; Lassater.
McDonald, A. A.; Meharry, 1915; 86%; Mexia.
Monhouse, I. K.; Col. of O. P. & S., 1915 (D. O.); 87%; York, Neb.
Moore, Z. J.; Univ. of Tex., 1915; 82%; Bartlett.
Mitchell, Jno. H.; Tulane Univ., 1915; 86%; Franklin.
Nesbit, W. E.; Johns Hopkins, 1913; 90%; Fayetteville, Ark.
Neighbors, A. H.; Univ. of Tex., 1915; 87%; Waelder.
Olive, Roy A.; Vanderbilt, 1915; 80%; San Angelo.
Putnam, L. F.; Univ. of Tex., 1915; 86%; Houston.
Pence, C. P.; Baylor, 1915; 79%; Dallas.
Potthast, A. H.; Univ. of Tex., 1915; 87%; Weimar.
Potthast, O. J.; Univ. of Tex., 1915; 89%; Weimar.
Peterson, T. H.; Baylor, 1915; 85%; Dallas.
Paschal, F. L.; Johns Hopkins, 1913; 88%; San Antonio.
Pressly, T. A.; Univ. of Tex., 1915; 80%; Runge.
Patton, F. M.; T. C. U., 1915; 86%; Fort Worth.
P'Pool, W. F.; Univ. of Louisville, 1915; 89%; Anson.
Penman, C. A.; Rush Medical, 1910; 88%; Beaumont.
Russell, Roy G.; American S. of O., 1915 (D. O.); 86%; Fort Worth.
Robinson, O. W.; Tulane, 1915; 89%; Biardstown.
Ramsey, W. E.; Univ. of Tex., 1915; 89%; Houston.
Rogers, A. C.; Southern Meth., 1915; 87%; Waxahachie.
Ross, Griff; Baylor, 1915; 91%; Mt. Enterprise.
Rey, Jose M. Y.; Nat'l School, 1901; 81%; El Paso.

Reid, Jas. Wm., Jr.; Univ. of Texas., 1915; 91%; Calvert.
Shirey, G. O.; Univ. of Tenn., 1914; 86%; Fort Worth.
Scharff, O. A.; American S. of O., 1915 (D. O.); 86%; Temple.
Stone, Chas. T.; Univ. of Tex., 1915; 93%; Galveston.
Smith, H. B.; Univ. of Tex., 1915; 89%; Galveston.
Siller, Juan C.; Nat'l Medical, 1887; 75%; San Antonio.
Smith, O. A.; Univ. of Tex., 1915; 85%; Mansfield.
Tucker, J. T.; T. C. U., 1915; 82%; Fort Worth.
Thompson, A. E.; Meharry, 1915; 86%; Dallas.
Teddlie, Gomer; Vanderbilt, 1915; 87%; Fort Worth.
Tomkins, Jas. S.; Harvard, 1908; 84%; Dallas.
Tyler, R. E.; T. C. U., 1915; 84%; Fort Worth.
Thaison, Adellina; American S. of O., 1915 (D. O.), 89%; Kirksville, Mo.
Usry, R. S.; Baylor, 1915; 89%; Dallas.
Venable, S. C.; Univ. of Tex., 1915; 93%; Sherman.
Williamson, J. E.; Univ. of Tenn., 1912; 75%; Tyler.
Watts, Wm.; Meharry, 1915; 89%; Houston.
Warren, W. M.; Univ. of Tex., 1915; 90%; Galveston.
Wallace, H. C.; Meharry, 1915; 81%; Honey Grove.
Wells, Geo. R.; Los Angeles C. of O., 1915; 84%; El Paso.
Wyatt, C. A.; Tulane, 1915; 88%; Beckville.
Warren, H. F.; Vanderbilt, 1915; 84%; Alvarado.
Wilson, E. B.; Univ. of Penn., 1915; 83%; San Antonio.
Wages, A. D.; Southern Meth., 1915; 84%; Dallas.
Whittington, H. D.; Baylor, 1915; 87%; Eastland.
Ward, E. E.; Meharry, 1915; 79%; Dallas.
Wilhite, G. W.; Univ. of Tenn., 1915; 86%; Palestine.
Young, T. W.; Tulane, 1915; 89%; Clinton, La.

MIDWIFE.

Hoyas, R C. Vda De; Midwife; San Antonio.
Zito, Mrs. Clelio; Univ. of Rome; Midwife; 75%; Bryan.

FAILED.

——————Univ. of Tenn., 1915.
——————American S. of O., 1915 (D. O.).
——————American S. of O., 1915 (D. O.).
——————Chicago Col. of P. & S., 1914.

LICENSED BY RECIPROCITY AND VERIFICATION, NOVEMBER 10, 1914 TO JUNE 23, 1915.

Parker, Wm. W.; T. C. U., 1906; Okla.
Redmond, Jno. L.; Univ. of Penn., 1913; Md.
Foster, Wm. B.; Univ. of Minn., 1907; N. D.
Sperling, Fred J. R.; Hahnemann Med., 1907; Md.
Zaring, Philip A.; Vanderbilt, 1893; Ind.
Hottendorf, L. T. A.; Ohio Medical, 1907; Ohio.
Switzer, Alfred M.; Detroit College, 1897; Mich.
Mackoy, Frank W.; Univ. of Ill., 1905; Ark.
Garrison, T. N.; (verification).
Henderson, R. A.; Meharry Med., 1904; Mo.
Phillips, Clarke E.; Rush Medical, 1902; Wis.
Baskett, Lindsay W.; Univ. of Mich., 1909; Minn.
Harrison, Jas. G.; Louisville Med., 1896; Ga.
Schroyer, Chas. T.; Ohio Medical, 1898; Ohio.
Gibson, Hugh R.; Vanderbilt, 1888; Ky.
Engle, Paul; Maryland Medical, 1901; W. Va.
Price, Horace T.; St. Louis Univ., 1912; Mo.
Romeo, Pasquale; Eclectic Medical, 1914; Ark.
Keyes, C. T.; Memphis Hos. Med., 1897; Miss.
Blaine, V. B. O.; K. C. Homeopathic, 1899; Mo.
Saunders, H. F.; (verification).
Davis, John L.; Miami Medical, 1881; Ohio.
Palmer, J. R.; Louisville Medical, 1874; Ga.
Simpson, J. A.; Vanderbilt, 1900; Ky.
Carter, L. A.; Jenner Medical, 1912; Ark.
Osterhout, Paul; (verification).
Gomex, F. V.; Mexico; Mexico.
Urrutia, Arreliano; Mexico.
Gano, S. J.; (verification).
Traynham, Felix G.; (verification).
Armstrong, D.; (verification).
Swartz, G. C.; (verification).
Coulson, Richard; Tufts Medical, 1903; Mo.
Athey, Chas. E.; Western Reserve, 1893; Ohio.
Blackshear, R. D.; Kentucky Medical, 1892; Ga.
McBride, Geo. A.; Ark. Med. Univ., 1889; Okla.
Lynch, Orin B.; Seminary Univ. of Louisville, 1913; W. Va.
Campbell, J. F.; Atlanta Col. of P. & S., 1902; Okla.
Brinson, M. W.; Baylor Univ., 1908; Okla.
Moore, Neil S.; St. Louis Univ., 1913; Mo.

NOTICE OF STATE BOARD EXAMINATION.

The regular semi-annual examination of the Texas State Board of Medical Examiners will be held in Dallas, at the Adolphus Hotel on November 9, 10, 11, 1915. All applicants should be present at 9:00 a. m., November 9th and present their diplomas for inspection. The following is the schedule of examination:

Tuesday, 9:00 to 10:00 a. m., Inspection of Diplomas; 10:00 to 12:00 a. m., Anatomy (Dr. Cooper), 10 questions; 1:45 to 3:45 p. m., Physiology (Dr. Bettencourt), 10 questions; 4:00 to 6:00 p. m., Chemistry (Dr. Williams), 10 questions; 8:00 to 10:00 p. m., Hygiene (Dr. Swain), 10 questions.

Wednesday, 8:00 to 10:00 a. m., Histology (Dr. Mason), 10 questions; 10:15 to 12:15 p. m., Medical Jurisprudence (Dr. Crowe), 10 questions; 1:45 to 3:45 p. m., Bacteriology (Dr. Morrow), 10 questions; 4:00 to 6:00 p. m., Obstetrics (Dr. McElhannon), 10 questions.

Thursday, 8:00 to 10:30 p. m., Gynecology (Dr. McLean), 10 questions; 10:45 to 12:15 p. m., Pathology (Dr. Swain), 10 questions; 1:45 to 3:45 p. m., Physical Diagnosis (Dr. Scothorne), 10 questions; 4:00 to 6:00 p. m., Surgery (Dr. McCelvey), 10 questions.

The order of examination cannot be varied from in any respect and every applicant who desires to be examined must commence the examination on the morning of Tuesday, November 9th. No person will be examined on November 9-11, except those who have made proper application on the blank forms furnished by the State Board of Medical Examiners and have paid the fee on or before November 7th. The fee will be returned to those unable to appear for examination; but unless the applicant is prevented by illness from taking the examination he shall forfeit the sum of $2.00 of the fee paid, to defray expenses incurred in arranging for his examination. Applicants are required to pay a fee of fifty cents to defray expenses of paper and envelopes for the examination, which the Secretary furnishes. This fee should be sent in with the application. The applicant's fee must be sent to the Secretary at Belton. The applicant must present his diploma for inspection at the examination, not sending it to the Secretary's office. The filing of an application or the taking of an examination, does not entitle the applicant to practice, the only legal authority being a certificate from the State Board of Medical Examiners, recorded in the District Clerk's office of the county of residence.

M. P. McElhannon, Secretary,
Belton, Texas.

CONDITION OF TABLETS IN STOCK.

Dear Doctor: I am sending you an article on tablets. This work was outlined by me and given to our pharmacy students as a part of their general training.

The work in this particular paper was given to one of our most careful and most accurate students. I supervised the work and can vouch for its accuracy.

It clearly points out what I have already stated to the State Medical Association—the necessity of stronger laws governing pharmacy. Nothing has been achieved in this line. I was hoping the doctors of Texas would do something. Texas will never get the legislation needed until the doctors, in the interest of the public welfare, undertake to get such matters adjusted. North Carolina has recently passed a law requiring an attendance of at least nine months in some reputable school of pharmacy, to entitle one to take the State Pharmacy Examination. This article ought to make most interesting reading.

Fraternally yours,
R. R. D. Cline.
Prof. Pharmacy, Medical Department U. of T.,
Galveston, Texas.

It is generally conceded by the manufacturers, and pretty generally known, not only by doctors, but also by a great many of the laity, that tablets differ very widely in uniformity (amount of active matter) and in solubility.

Indeed, many manufacturers stress the fact that

their tablets are made in such a way, with such material, and by such skilled workers that they are uniform in strength and are easily and readily dissolved.

As a matter of fact, while it is true that skill, machinery and proper material are absolutely needed to have uniformity and solubility, it is equally true that the maintainence of uniformity and solubility will depend upon the mode of storage and the age of the product. It is indeed surprising that, until recently, no one placed much value on the importance of storage and on the age of the product.

Some of the claims made by the manufacturers of tablets are accuracy, economy, palatability, concentration, rapid solubility, stability, and convenience for the physician. These claims ignore, or attempt to conceal, the fact that improper storage, or even with the best storage, that it is possible for changes to take place. Now we know that these changes do occur, and because of the great influence of air, light and moisture many delicate products are now being put on the market in Ampul form, these containers being of colored glass, exhausted of air, sterilized, advised to be kept in cold, dry storage, and even then numbered (evidently thereby recognizing that even with all these precautions deterioration can and will occur in time).

Before investigating the condition of tablets, I beg to direct your attention to the fact that, according to the purpose for which they are intended, tablets may be divided into three groups: (1) Those for sterilization or fumigation; (2) those to be taken by the mouth and known as Tablet Triturates, (3) and those for injection under the skin, in the muscles, in the veins, or in the spinal canal, this latter group being known as Hypodermic Tablets.

The bases used in the manufacture of tablets are usually cane sugar, milk sugar, ammonium chloride, citric acid, sodium chloride and exsiccated sodium or potassium sulphate. Ammonium chloride, sodium chloride and citric acid are used, not only to increase the bulk of the preparation, but to facilitate the solubility of tablets, especially bichloride tablets. Milk sugar is used because of its property of producing a tablet of a porous nature, and because of its adhesiveness; it is now almost universally used in the manufacture of these preparations. Starch and gelatine are used as disintegrators. On absorbing moisture starch swells and mechanically causes the tablet to fall to pieces. Gelatine acts much in the same way. At one time, and to a smaller extent now, a mixture of sodium bicarbonate and citric or tartaric acid, was used for this purpose, carbon dioxide being given off in the presence of water. This gas, in escaping, mechanically causes the tablet to crumble. The term "filler" has been applied to substances like Terra Alba, Fuller's Earth, Kaolin, etc., serving the purpose of a base. They are usually considered inert and harmless, but their introduction into the system must be looked upon as undesirable. Their use in confectionery is forbidden by law.

Almost all tablet manufacturers claim that the weights of their tablets and the amounts of active constituents, are within two per cent of the weights declared on the label. On weighing a number of tablets the results show that, as a rule, the weight of each tablet is within two per cent of the average weight. From these figures alone it would appear that tablets are a very accurate form of administering medicines.

Now to the determination of the amounts of active constituents. A number of tablets were assayed, the results being given below.

DIGITOXIN TABLETS.

The method used was Keller's, with an improvement by Dr. Cline. The results from two different samples are as follows:

Sample	Amt. Found	Amt. Declared	Above or Below
I	0.1 mg.	0.25 mg.	60% below
II	0.2 mg.	0.25 mg.	20% below

This shows a wide variation. These tablets were of the same manufacture, and were the same age, but were purchased at different stores. Thus the necessity of proper storage of tablets is apparent.

BICHLORIDE OF MERCURY TABLETS.

Below are the results obtained by the Formaldehyde method:

Sample	Amt. Found	Amt. Declared	Above or Below	
A	5.3 grains	7.3 grains	29% below	Antiseptic Tablets
B	5.33 grains	7.3 grains	27% below	
C	4.51 grains	7.3 grains	38% below	
D	4.85 grains	7.3 grains	34% below	
E	4.22 grains	7.3 grains	42% below	
F	7.4 grains	7.3 grains	1 % above	
G (Disp.)	0.673 grains	1 grain	32% below	

H—Each of ten Tablet Triturates which were claimed to contain 1/40 grain each, contained barely a trace, practically none. It had been completely converted into calomel and metallic mercury.

TABLETS TRITURATES OF BINIODIDE OF MERCURY.

The following results were obtained in an assay of these tablets, the Formaldehyde method being used:

Sample	Amt. Found	Amt. Declared	Above or Below
A	1/14 grain	⅛ grain	42% below

Five tablets of Strophanthin were assayed by a modification of Barclay's method. Each tablet was found to contain 1/33 grain. They should contain 1/30 grain.

Five tablets of Colchiceine were assayed, a modification of the U. S. P. method of Colchicum assay being used, with the following results:

Sample	Amt. Found	Amt. Declared
A	1/33 grain	1/30 grain
B	1/50 grain	1/30 grain

The above results show that tablets are not as uniform in size, as accurate, or as soluble as they are generally believed to be. Many of these results were obtained from different tablets taken from the same container. This tends to show that the ingredients in the tablet mass had not been thoroughly mixed. It also shows that it is absolutely essential that tablets be stored in the proper way. One sample of Bichloride of Mercury Tablet Triturates was bought on the open market and contained only a trace of the bichloride. The tablets had become blackened and a large amount of calomel was present. They had been stored in a light bottle and were placed in a damp place. If this happens to as stable a substance as corrosive sublimate, what must we expect from the careless handling and storing of the more delicate substances?

The results obtained in our laboratory coincide with results found by other investigators who have analyzed tablets of Nitroglycerine, Morphine, and even Strychnine, finding results that were as surprising as they were deplorable.

According to a great number of pharmaceutical chemists, these surprising deficiencies are all to be accounted for more by improper storage, or because the tablets had been made and had been on hand for a long time, than to any fault of the manufacturer.

There are three important conclusions:

(1) That physicians should not place so much trust in tablets.

(2) These results show why treatment by tablets is often not attended with expected results, and sometimes are attended by very undesirable results, due to changes producing new and dangerous compounds, as in the case of alkaloids.

(3) That even should physicians use nothing but tablets they will have to look to and can only expect good results of druggists who are educated and trained men.

In conclusion, I wish to state that, not only in our Southern States, but in a great many other States, the people, and even the doctors, have not come to realize, not only the importance, but the absolute necessity, of strict laws regulating the practice of pharmacy.

The druggist stands in the same relation to the doctor that the Commissary Department of an Army occupies with reference to the officers and people of the Nation. If doctors more thoroughly appreciated to what extent their results are dependent on these conditions, they would agitate this matter until, joined by the better classes of the community, they would not only ask for but demand such legislation as would result in better health, and often in fewer deaths for our people, and less discouragement and failure in treatment by our physicians.

NOTICE.

The Texas Surgical Society will hold its first semi-annual meeting at San Antonio, October 18th and 19th, 1915. Application blanks for membership will be furnished by the secretary upon request.

W. Burton Thorning, Secretary, Houston, Texas.

COUNTRY PRACTITIONERS PLEASE NOTICE.

To the Editor:—The undersigned, for the purposes of a paper on the midwife question in America, is very anxious to get information relative to the number of midwives in country (farming, lumber, mining) districts, in small villages and towns.

Would the doctors in such districts, villages and towns kindly jot down on a postal card answers to the following questions and mail to me?

1. How many midwives practice in your vicinity?
2. Do you consider the midwives a necessity in your neighborhood?

Any other information will be gratefully received.

Joseph B. De Lee, M. D., 5028 Ellis Ave., Chicago.

—*The Journal of the American Medical Association.*

THE HOROWITZ-BEEBE TREATMENT FOR CANCER.

A new "treatment for inoperable cancer" has, during the last two months, been widely acclaimed in the lay press and in some medical journals. The first public announcement of this treatment appears to have been published in the New York *Times*, February 19, 1915, and was to the effect that a "new cancer serum" (called by the newspapers "autolysin") had been devised at the General Memorial Hospital in New York City and used with curative effect in hopeless cases in the last stages of the disease. As the General Memorial Hospital is a research institution associated with the Cornell University Medical College, the report received more attention than it might otherwise have achieved. March 6, 1915, a statement, signed "for the Medical Board of the General Memorial Hospital" by James Ewing, W. B. Coley, Richard Weil and S. P. Beebe, appeared in several medical journals. It said:

"While it is impossible to discuss in detail every error in the report, it is possible to deny categorically the chief assertions made in the article."

Among the other statements made in this denial is the following:

"We know of nothing that seems likely to prove a constitutional remedy for advanced cancer. All we hope to do at the General Memorial Hospital is in the line of painstaking study of different forms of cancer, the persistent application of well attested remedies and palliatives in the disease, and the investigation of such other methods as present a sound theoretical basis always with strict regard to the interests of the individual patient."

Nevertheless, in spite of the statement of this committee, there appeared shortly afterward an article signed by S. P. Beebe, entitled "A Treatment for Inoperable Cancer—A Preliminary Report." The other members of the board of the Memorial Hospital do not appear as co-authors.

As a scientific contribution, this article is a remarkable statement, especially when it is kept in mind that the author was connected as professor of experimental therapeutics with a leading medical school. The author describes the introduction of the system of treatment by "Alexander Horowitz, Ph. D., an Austrian biologist and chemist," and its trial at the General Memorial Hospital. Despite the previous reference to "sound theoretical basis," there is no statement made of preliminary investigations of the action of this therapeutic agent or its multitudinous components on anything except human patients, although coincident experiments with sarcoma rats are mentioned. The composition of the preparation is not disclosed as to quantities, but it is said to be made from some twelve different herbs. As one critic has said, apparently the only ingredient overlooked in the preparation of the new remedy was a rabbit's foot.

The cases reported number sixteen. Three were superficial skin cancers, which are said to have been completely healed under the influence of the poultice, as, of course, they might well have done under any escharotic application. In only one of the cases is any data given as to the length of time the patient was under observation—but evidently this is far too brief for anyone to draw conclusions as to results Another group of seven "hopelessly incurable and inoperable" cases is next mentioned. Of these, five patients died under treatment and the other two refused to continue it, although improvement is said to have occurred in three of the seven. The remaining six cases were treated by Beebe and J. Wallace Beveridge in another hospital by injections of the extract into the tumor tissue, with the production of necrosis and diminution in size of the tumors in some cases, although one of these patients died.

Aside from this very unpromising report, apparently all that has been published in any medical journal are stereotyped excerpts from it which have appeared simultaneously as abstracts in several medical journals. If this were all that had been published, there would probably not be the prevailing excitement over the subject. The greatest marvel, perhaps, was why this report was published at all, dealing as it does with only sixteen cases, under only a short period of observation, with results that are apparently no better than could be secured by applying arsenic paste or injecting a solution of any escharotic substance into the tumors. What is there of scientific interest or therapeutic advance in such a procedure? Why should any person with critical judgment or scientific training of the slightest degree rush into print with a cancer treatment of but a few weeks' or months' trial, and founded on nothing more theoretically sound or inspiring than a Chinese materia medica? Why, too, asks *The Journal of the American Medical Association*, should the lay press be furnished with literary articles on the subject by some of those engaged in promulgating this treatment, and why should these articles be embellished with exquisite half-tone reproductions of the features of the experimenters?

The status of the Horowitz-Beebe method of treatment of cancer can be estimated by applying an average knowledge of pharmacology, sociology, psychology and, above all, we fear, economics.

SYPHILIS OF THE EAR.

H. Hasting, Los Angeles, (*Journal A. M. A.*, Aug. 14, 1915), reports a case of ear disease in a girl, aged 20, both of whose parents had been infected with syphilis but considered themselves recovered. The general health of the patient had been excellent, but she had trouble with the eyes when a child (interstitial keratitis). Her teeth gave suspicion of her hereditary syphilis and her hearing was very much impaired. She had suffered also from dizziness and noises in the ears and had had nystagmus. A blood Wassermann test was considered negative by the expert; there was a slight reaction, but not enough to be considered positive. There was slight oscillatory nystagmus and other conditions in the eyes regarded as suggesting hereditary syphilis. Salvarsan treatment was objected to, but the patient was put on a vigorous mercurial treatment and improved. A second Wassermann taken was negative.

CONGENITAL SYPHILIS.

D. J. Glomset, Des Moines, Iowa, (*Journal A. M. A.*, August 21, 1915), discusses congenital syphilis in the light of the Wassermann reaction. Formerly the terms hereditary and congenital were applied synonymously; now we know that neither syphilis nor any other infectious disease is truly hereditary. Three routes of infection have been thought open for the congenital transmission of syphilis, namely, through the germ cells, from the father direct to the fetus, and through the placenta. We know that the delicate mobile spirochetes readily enter the body fluids, hence we should expect to find them in the semen, and gummas have been produced in apes and rabbits by its inoculation. It is hard to see, however, how the spermatozoon or ovum harboring the germs should be able to develop, or that the spirochetes from the semen should be able to pass to the fetal tissue without first infecting the mother. The anatomic and physiologic relationships of the placenta at once suggested that the highway through which the infections are transmitted in utero in syphilitic mothers may be divided into two classes: Those who are suffering from syphilis at the time of conception and those who are infected during pregnancy. It is obvious that the activity of the infection in the mother is an important factor. In the moderately active syphilis or latent stage of the disease the chances of infection increase with the growth of the placenta and it seems logical also that the increasing stress of pregnancy renders a quiescent syphilitic focus as susceptible to a flare-up as with other infectious diseases. It has been customary to recognize two distinct effects of syphilis in the offspring: one, the injury to the germ cell by the toxin causing the so-called syphilitic dystrophies, and the other the true syphilitic infection. Many of these, such as Hutchinson's teeth, bony nodes, etc., are directly the result of the infection. On the other hand many deformities formerly credited to syphilis have been shown to give negative Wassermanns. More recently, however, Stevens has advanced the idea that Mongolian idiocy is a hereditary defect of syphilitic origin. Many factors determining the pathogenicity of any infectious disease are only partly or altogether unknown at present, but all that we know in regard to syphilis with the exception of the initial sore shows that all the features of the acquired form occur in the congenital type. Since infection of the fetus rarely occurs in the early period of pregnancy we should not expect syphilis to play an important role in the premature ending, but as the condition progresses it becomes a most important etiologic factor of miscarriage. When infection takes place at a still later period or when a period of latency ensues the child may be born with florid secondary symptoms or these may develop after birth. In the congenital as well as acquired form of the disease a few cases pass through a longer or shorter period of latency, and sometimes this lasts for many years. The organisms have been found in persons free from any symptoms for many years. The possible transmission of syphilis into a third generation is strongly suggested from all these facts and Glomset reports two cases in which he thinks it has probably occurred. In one of the two he is not so certain on account of the moral character of the parties, but it appears likely. He does not consider these cases infallible proof as to the transmission to the third generation, but they are at least strongly suggestive.

LUETIN REACTION.

J. W. Sherrick, Ann Arbor, Mich., (*Journal A. M. A.*, July 31, 1915), calls attention to the fact that administration of potassium iodid will produce a positive luetin reaction in nonsyphilitic individuals, making the test utterly unreliable where this drug has been administered. The period elapsing between the injections of the luetin material and the injection of potassium iodid may vary widely with still positive results. In one case with a negative luetin result, potassium iodid was given in small doses about two months later and the old seat of the test immediately developed an areola with a firm red central nodule. The potassium iodid was discontinued and the nodule disappeared, not going on to the pustular stage. A reaction similar to the luetin can be obtained by intradermal injection of other substances such as agar, starch, etc., and the administration of potassium iodid. Agar gives a more intense response than the luetin, and this has been obtained by administering the iodid about four weeks after injection of the agar. Other drugs which contain iodin, such as thyroid extracts, will develop a similar reaction, but painting the lesion with iodin does not give the reaction.

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1915, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies."

Cephaeline.—An alkaloid obtained from ipecac. It is relatively more emetic and less nauseant than ipecac and causes more renal irritation and less cardiac depression. It may be used as an emetic and expectorant. It is insoluble in water, but forms water soluble salts.

Syrup Cephaeline, Lilly.—A non-proprietary preparation containing cephaeline hydrochloride, equivalent to 2/5 grain cephaeline per fluidounce. Eli Lilly and Co., Indianapolis, Ind. (*Jour. A. M. A.*, June 19, 1915.)

Ouabain Ampules, H. W. and Co.—Each ampule contains 0.5 mg. crystallized ouabain. Hynson, Westcott and Co., Baltimore, Md. (*Jour. A. M. A.*, June 19, 1915.)

Caustic Applicators.—Special (Silver Nitrate, 50 per cent.)—Wooden sticks, 12 in. long, tipped with a mixture of silver nitrate 50 per cent and potassium nitrate 50 per cent. Antiseptic Supply Co., New York. (*Jour A. M. A.*, July 3, 1915.)

Enzymol.—An extract of the fresh animal stomach containing the gastric enzyme in active standarized form and having an acidity due to combined hydrochloric acid. Enzymol is stated to be useful as an application to old sores, ulcers and slow healing wounds. It is said to correct offensive odors, to exert a solvent action on pus, sloughing and necrotic

tissue and to impart a healing stimulus. For the solution of necrotic bone and in some abscesses hydrochloric acid is added to the diluted extract. (*Jour. A. M. A.*, July 24, 1915.)

PROPAGANDA FOR REFORM.

TANLAC.—Tanlac (The Cooper Medicine Co., Dayton, O.,) is a "tonic and system purifier" and is exploited to the public by means of extravagant and absurd claims. From an examination made in the A. M. A. Chemical Laboratory it appears that Tanlac is essentially a vinous extract which contains 15.7 per cent absolute alcohol by volume, a bitter drug (such as gentian,) an emodin-bearing drug (such as buckthorn, rhubarb or cascara,) a berberine-bearing drug devoid of hydrastine (such as berberis aquifolium,) glycyrrhizic acid (from licorice,) and flavored with wild cherry and to which has been added a relatively large proportion of glycerine. The "Tanlac Laxative Tablets" which accompany Tanlac contained phenolphthalein. (*Jour. A. M. A.*, June 5, 1915.)

E-LEP-TINE.—E-Lep-Tine is an "epilepsy cure." According to the Indiana State Board of Health, it contained sodium and potassium bromides 16 per cent, alcohol and ammonium valerate. (*Jour. A. M. A.*, June 12, 1915.)

HERBETTA CURINE.—A package of Herbetta Curine contained three envelopes, labeled 1, 2 and 3 respectively, and in addition a number of red tablets. The A. M. A. Chemical Laboratory found that No. 1 consisted of tablets which contained soluble iron phosphate; No. 2, of tablets which contained some "bitter tonic," and No. 3, of tablets responding to tests for aloes and aloin. The red tablets were composed essentially of strontium and potassium bromide. (*Jour. A. M. A.*, June 12, 1915.)

LEPSO.—The A. M. A. Chemical Laboratory found this to contain bromides, equivalent to 51 grains potassium bromide per dose of one-half ounce. (*Jour. A. M. A.*, June 12, 1915.)

IODEX.—Iodex (Menley and James, Ltd., New York,) is said to contain 5 per cent of iodin; the advertising suggests that the effects of free iodin are to be obtained from the preparation, which yet is said not to stain the skin. It is also claimed that thirty minutes after inunction, iodine can be found in the urine. The chemists of the A. M. A. Chemical Laboratory on examination found that Iodex contained only about half the claimed amount of iodin, that the iodin did not behave as free iodin and that after inunction of Iodex, iodin could not be found in the urine. Because of these findings and because of the unwarranted therapeutic claims made for the preparation, the Council on Pharmacy and Chemistry held Iodex ineligible for New and Nonofficial Remedies. (*Jour. A. M. A.*, June 19, 1915.)

VENODINE.—Venodine (The Intravenous Products Co., Denver,) was stated to be "an Intravenous Iodine Compound" put up in ampules, each of which contains "28 grains of Sodium Iodide, ⅛ grain each of Beechwood, Creosote and Guaiacol in a suitable vehicle, and excipients to enhance its compatibility with the circulating blood." The "Therapeutic Indications" were said to include "infectious diseases, such as syphilis, tuberculosis, bronchitis, bacteraemias associated with chronic and acute nephritis (Bright's disease) and other infections." The Council on Pharmacy and Chemistry found Venodine ineligible for New and Nonofficial Remedies because it was exploited under unwarranted and grossly exaggerated therapeutic claims; because neither the name nor the advertising matter indicated that it was a preparation of the well-known sodium iodide; and because the combination of two such similar substances as creosote and guaiacol is unscientific, adding mystery to the preparation without increasing its efficiency. (*Jour. A. M. A.*, June 26, 1915.)

CALCREOSE.—Calcreose (Maltbie Chemical Co., Newark, N. J.,) contains in loose combination approximately equal weights of creosote and lime. The advertising claims having been revised, the Council on Pharmacy and Chemistry postponed definite action pending submission of proof (1) that the large doses of Calcreose recommended furnish large amounts of creosote to the blood and (2) that patients taking these large doses do not suffer from digestive disturbances, loss of nutrition, albumin in the urine or phenol urine as claimed. At the same time it was emphasized that this action did not indicate a belief on the part of the Council that enormous doses of creosote are necessary or beneficial in tuberculosis. So far, the Maltbie Chemical Co. has not submitted the required evidence. As the Council's postponement of a report has been made to appear as a quasi-approval, the Council, voted to announce that Calcreose had been refused recognition because the therapeutic claims were exaggerated and unwarranted by the evidence. (*Jour. A. M. A.*, June 26, 1915.)

INTRAVENOUS RADIUM SOLUTION.—Standard Radium Solution for Intravenous Use. (Radium Chemical Co., Pittsburg,) is sold in ampules, each containing radium bromide equivalent to 0.05 mgm. radium element and 0.0002 Gm. or less of barium bromide dissolved in 2 Cc. sterile normal salt solution. While the Council on Pharmacy and Chemistry confirmed the claimed composition of this solution so far as concerns the radium content, it refused recognition to the preparation because there is no clear evidence that intravenous injection has any advantage over the other methods of administering radium. The Council holds that on the basis of our present knowledge radium should be used intravenously only by those in a position to study its effects carefully and in an institution equipped with the necessary facilities for such study. (*Jour. A. M. A.*, June 26, 1915.)

RHEUMALGINE.—Rheumalgine (Eli Lilly and Co., Indianapolis,) is put up both in tablet form and as a liquid. Each tablet, or teaspoonful of the liquid, is said to contain: "Strontium salicylate from Natural Oil 5 gr., Hexamethylenamin 2 gr., Colchicine 1/200 gr." The Council on Pharmacy and Chemistry found Rheumalgine in conflict with its rules in that unwarranted therapeutic claims were made because the combination is conducive to uncritical prescribing and because the name, being nondescriptive of its composition, encourages thoughtless use. (*Jour. A. M. A.*, June 26, 1915.)

TYPHOID VACCINE.—Extensive clinical trial indicates that typhoid vaccine may influence the course of the disease favorably. The results indicate that, if used with discretion, typhoid vaccines do no harm. (*Jour. A. M. A.*, June 26, 1915.)

ANTOX.—"Dr." W. J. Garbutt, Milwaukee, Wis., sells Antox. It is said to cure every contagious disease if taken at the onset. Garbutt issues two sets of advertising, one for physicians and one for the public. The A. M. A. Chemical Laboratory found that essentially each 100 c. c. contained approximately 0.92 gm. ammonium chlorid, 0.12 gm. hydrogen chlorid (equivalent to 1.2 c. c. of diluted hydrochloric acid, U. S. P.,) 0.35 gm. hydrogen sulphite (equivalent to 6 c. c. of sulphurous acid, U. S. P.,) and 18.5 gm. of invert sugar. (*Jour. A. M. A.*, July 3, 1915.)

GRAY'S GLYCERINE TONIC.—The Council on Pharmacy and Chemistry reports that Gray's Glycerine Tonic Comp. (Purdue Frederick Company, N. Y.,) is not eligible for admission to New and Nonofficial Remedies because its composition is secret; because grossly unwarranted therapeutic claims are made

for it; because the name of this pharmaceutical mixture does not indicate its chief constituent, gentian, and because its use is unscientific and a detriment to rational medicine. From the statements made in regard to its composition it appears that besides the alcohol, gentian is the only active drug present. Nevertheless the "tonic" is said to be good for no less than thirty-two diseases, ranging from amenorrhea to whooping cough. (*Jour. A. M. A.*, July 10, 1915.)

Liquid Petrolatum.—Liquid petrolatum is sold under proprietary names such as Bakurol, Interol, Med-O-Lin, Muthol, Semprolin, Whiteruss, Nujol and Stanolax. Nujol is put up by the Standard Oil Co. of New Jersey and Stanolax by the Standard Oil Co. of Indiana. Probably before long each of the other Standard Oil companies will have its own name for liquid perolatum—that is, if physicians will tolerate it. There is no excuse whatever for special brands of liquid petrolatum, so far as the medical profession and the public are concerned. But it is otherwise with those who supply the product. More can be charged for a product sold under a trade marked name and claims can be made which could not be made when the product is sold under its proper title, liquid petrolatum. (*Jour. A. M. A.*, July 10, 1915.)

Tongaline and Ponca Compound.—The Council on Pharmacy and Chemistry reports that Tongaline, Tongaline Tablets, Tongaline and Lithia Tablets, Tongaline and Quinine Tablets and Ponca Compound Tablets, products of the Mellier Drug Company, St. Louis, are ineligible for New and Nonofficial Remedies because their composition is indefinite and semi-secret; because grossly exaggerated therapeutic claims are made for them; because their names are misleading, and because their composition is unscientific and irrational. Tongaline is essentially a sodium salicylate mixture. Its name is derived from one of the asserted constituents, "Tonga," an inert, long discarded mixture of barks and herbs said to be gathered and prepared by Fiji Islanders. In addition, Tongaline is stated to contain blue cohosh, colchicum and pilocarpin. The amounts of the ingredients are not now declared. Neither is the composition of the Tongaline and Quinine and Tongaline and Lithia Tablets made known. Ponca Compound is a "female weakness" remedy in tablet form. The name suggests that "Ponca" is a medicinal substance and at one time "Ext. Ponca" was named as an ingredient. Now the tablets are said to contain extract of mitchella repens, senecin, helonin, caulophyllin and viburnin. Not only are no quantities given, but the character of senecin, helonin, caulophyllin and viburnin is not made known. (*Jour. A. M. A.*, July 17, 1915.)

Echinacea.—This is one of the drugs which the Council on Pharmacy and Chemistry has found valueless. Confirming this, the chemists of a pharmaceutical house report that they were unable to detect the presence of any physiologically active substance in the drug. (*Jour. A. M. A.*, July 24, 1915.)

Horowitz-Beebe Cancer Treatment.—Newspapers are giving much attention to a new "serum"—Autolysin—for the treatment of inoperable cancer. This had its origin in the publication by S. P. Beebe, formerly professor of experimental therapeutics at Cornell Medical School of a system of treatment by "Alexander Horowitz, Ph. D., an Austrian biologist and chemist" and its trial at the General Memorial Hospital. The composition of the preparation is not disclosed as to quantities, but it is said to be made from: Menyanthes trifoliata, Melilotus officinalis, Mentha crispa, Brassica alba, Anemone hepotica, Viola tricolor, anthemis, fructus colocynthidis lingnum quassiae, Urtica dioica, radix rhei and hedge hysoop. One critic of the matter has remarked that apparently the only ingredient which has been overlooked in the preparation of the new remedy was a rabbit's foot. (*Jour. A. M. A.*, July 24, 1915.)

O'Neil's Malt Whiskey; Mountain Valley Spring Water; Stafford Mineral Springs Water; Sa-Yo Mint Jujubes; Houchens' "Family Physician;" Dr. Martel's Female Pills; Quickstep, Frye's Remedy; Gray's Glycerine Tonic.—A "Notice of Judgment" has been issued by the Federal authorities regarding each of the proprietary preparations named. Each was found to be misbranded under the Shurley amendment to the Federal Food and Drugs Act, which declares it illegal to make false and unwarranted therapeutic claims for medicines. (*Jour. A. M. A.*, July 24, 1915.)

M. I. S. T. No. 2.—M. I. S. T. (Murray's Infallible System Tonic) No. 2 is sold as a cure for cancer, locomotor ataxia, paralysis, diabetes, suppressed and profuse menstruation and a host of other conditions. Analysis in the A. M. A. Chemical Laboratory demonstrated that M. I. S. T. No. 2 consists of capsules which contain aloes and blue mass as their essential constituents. (*Jour. A. M. A.*, July 31, 1915.)

Caldwell's Syrup Pepsin.—Some of the claims made for this "patent medicine" are "Positive Relief for Constipation," "Dispels Colds, Headache, Fevers and all ills caused from Bad Digestion, Foul Stomach, Torpid Liver and Sluggish Bowels." While the name and the claims suggest the presence of pepsin, L. F. Kebler, the government chemist, reported that this nostrum is an aqueous alcoholic solution containing laxatives flavored with oil of peppermint and devoid of any appreciable amounts of pepsin. Regarding the laxative constituents the A. M. A. Chemical Laboratory reports that a senna preparation is the essential laxative constituent. (*Jour. A. M. A.*, July 31, 1915.)

A GOOD FELLOW, BUT—

Do you know him? He's the best fellow you ever saw, unusually smart, popular, quick to promise, but blamed slow to deliver. He's the fellow that will assume obligation and discharge just enough of it to make more work for the other fellow to whom he is obligated. He is prevalent. He is found in public office, in commercial positions, in secretaryships of various county medical societies, and in lots of other places. He may be paid; he may not be. Whether he is paid or is not, if he assumes responsibility he should feel its weight resting upon him. But he does not. He can make more promises in less time than any other animal known, and he does keep fewer of his promises than any other animal known. He can acknowledge all his faults without turning an eyebrow. He can generate more excuses, none of them worth a darn, than a tree can shed leaves.

He is often a doctor. Patients call him and he tells them he will be there right away or sooner. He then proceeds to go somewhere else, and if it happens to be convenient, will call the next day. He is given to wondering why his professional income has been gradually lessening for several months. He knows all about everything that is going on—he can get more "dope" than ten up-to-date newspaper reporters. He can always tell you which show is worth going to see, and which one is rotten. He can give you all the latest jokes from the humorous publications; he can quote Elbert Hubbard until his listeners are almost persuaded that Elbert really got his tips from him. He goes to medical societies, all the way from here to Atlantic City. He is smart and quick, reads and remembers, and so makes a good showing when he

discusses a subject on the floor of the society. He is put on lots of committees and in other places of responsibility.

He's the fellow for whom tomorrow was created. He needs a darn good drubbing, literally and figuratively, and if he does not mend his ways and develop his sense of obligation, the drubbing is coming to him.—*The Journal of the Tennessee State Medical Association.*

NEW FEE-SPLITTING LAW IN WISCONSIN.

In 1913, following considerable discussion of the fee-splitting evil, the Wisconsin legislature passed a law making it a fraud for a surgeon to offer or to pay a commission for surgical patients referred to him. No penalty was imposed by this law on the receiver of the commission. An amendment recently passed by the present legislature provides that "any physician or surgeon . . . who shall . . . demand, receive or retain any money or other consideration directly or indirectly from the physician or surgeon treating or operating on the patient so induced or advised shall be guilty of a criminal fraud." The penalty for either giving or receiving a commission for surgical cases is fine or imprisonment, while conviction is made an automatic annulment of the license to practice. *The Journal of the American Medical Association* thinks that the law as amended should be broad enough and strong enough to put a stop to whatever fee-splitting evil there may be in Wisconsin.

WOOD ALCOHOL—POISON!

Despite unceasing endeavor to prohibit the sale of wood alcohol, this poisonous article is still used in the manufacture of quack medicines, hair-tonics, cheap whisky, essences, etc., and every now and then some innocent person is killed or made blind from its effects. Recently three persons died and two others were made completely blind from drinking a cordial made partly of wood alcohol. It is not generally known that poisonous symptoms follow its external application, as well as from taking it into the stomach. Thus rubbing the body with it after Turkish or other baths, burning it in "alcohol" lamps, using it for varnishing pianos, beer-vats, small rooms, etc., may induce slow and often unsuspected but serious damage to the digestion, sight, and nervous system. The manufacturers of wood alcohol have succeeded in removing the unpleasant odor and taste, disguising it in this way to facilitate its sale; but its poisonous properties are still there, and this "deodorized" alcohol under whatsoever name it may be called should not be purchased for domestic use. It should be the self imposed duty of every citizen, not only to abstain from using the poison himself, but to use his influence in bringing about a law to stop its manufacture and sale. All preparations containing this ingredient should be put in the list of poisons, and labeled with the skull and cross-bones.

A QUACK'S IMPUDENCE.

The impudence of the quack is notorious; monumental assurance is his chief asset. S. R. Chamley —or as he sometimes spells his name, "Chamlee"— is a quack of the "cancer cure" variety. With heartless cupidity he has defrauded the sick for more than a quarter of a century. Declared a fraud by the government and denied the use of the United States mails in St. Louis, Mo., where he conducted one branch of his nefarious business, Chamley calmly moved his offices to Chicago. From this city and from Los Angeles he has, apparently, without let or hindrance, continued to defraud the public with impunity. At different times Chamley has been exposed in *The Journal*, in *Collier's*, *Harper's*, in the Chicago *Tribune* and in numerous other publications; he has been prosecuted both by federal and state officials; nevertheless, he has continued to exploit his heartless fraud and today is using, as part of his advertising paraphernalia, a picture of a fifty-thousand dollar residence, built of blood-money wrung from the hopelessly sick. Now comes Chamley in a letter to physicians with this offer:

"I will take an oath and do hereby affirm that I have made nearly one-half million dollars with my cancer remedy. I am now an old man (63) and will sell it to you for only $20 and teach you by my book and typewritten correspondence to cure cancers on any part of the face and body. It is a most wonderful, strange but fortunate combination of several medicines, easily obtained at any large drug store. I often get $1,000 for curing a cancer and $300 to $500 is very common. . . . Price only $20 for a treatment that I have been making from 20,000 to 30,000 dollars every year for many years. . . ."

Possibly the human animal can descend to greater depths of depravity than that reached by the cancer quack—possibly, but not probably. Of all tainted gold none is quite so dirty as that filched from the hopeless sufferers from civilization's most dreaded scourge.—*The Journal of the American Medical Association*, Aug. 7, 1915.

CANCER OF THE BREAST.

Seven thousand women die from cancer of the breast each year in the United States, according to the estimate of the American Society for the Control of Cancer. According to the United States Census, there were 4,431 deaths from this disease in 1912 in the registration area, which represented at that time a little over 60 per cent of the population of the country.

In each of these 7,000 cases there was a time when the disease was curable. Unfortunately, it is not always discovered in the early stage. But Nature nearly always gives a timely warning. Alert intelligence and a prompt visit to a good surgeon would save a great proportion of the women attacked by this disease.

In a little pamphlet called "The Story of Mrs. Harrison," the Cancer Society has recently told how one wise woman took the step in time and averted the terrible danger in which she found herself. Years later her friends, seeing her looking so well and happy, envied her because "she had never been sick a day in her life!" It will be said that such cases are exceptional. So they are because, unfortunately, such wise and courageous patients are exceptional. It is a pity that information and education about cancer are not universal. It is a pity that instead of knowledge that saves, we see daily evidence of superstition that kills. It is a pity that a single precious moment after the discovery of symptoms is ever wasted in listening to criminal quacks who promise cure without the use of the knife and employ internal stimulants and external pastes, which are either useless, or in such hands, dangerous.

As a result when the sufferer does finally come to the surgeon she comes as a last resort, too often hoping or even expecting him to accomplish the impossible.

What are the signs, then, which should take any woman who discovers them at once to her family physician or to the nearest good surgeon or large hospital?

Any lump or unnatural hardness in any part of the breast or in the armpit, or any reddish or brownish discharge from the nipple with or without soreness should receive instant attention and should be brought to the notice of the family doctor or a competent surgeon.

And especially is the painless lump to be feared for the breast cancer in its earlier stages does not compel notice by painful sensations.

When we speak of a lump or an unnatural hardness it means that cancer of the breast is not at first accompanied by any noticeable change in the size or shape of the breast, or in the consistency of the remainder of it. The disease sometimes shows itself as a hardening or shrinking of the breast with indrawing of the nipple. In such cases the pores of the skin over the location of the disease later become very pronounced so that the appearance is much like that of pigskin. But in the beginning there is no change noticeable except the *lump* or *hardness*. If a woman discovers this sign she should go at once to a physician in whom she can have perfect confidence. He will determine the necessity for further counsel. The patient should not handle or irritate the affected part, but should do exactly as the doctor advises. No one more earnestly desires her to be cured than he.

Now all this does not mean that there is more danger because some one in the family has suffered from cancer. Nor on the other hand, is one safe just because the disease never appeared in the family before.

The unfounded fear of cancer will cause many of the symptoms of the disease. Like the baldheaded man who caught cold from sitting under a window which he thought was open, a woman has been known to worry forty pounds away on account of a lump in her breast, which, removed by a simple operation, proved not to be cancer—and the forty pounds came back with the relief which followed.

Cancer of the breast will be permanently cured if it is extirpated before it has spread beyond the place where it began. It becomes constitutional if neglected. Any woman may be attacked by cancer of the breast. A mother nursing her child is not immune. Pain comes late, but it does not mean that the case is hopeless. "In the early treatment of cancer lies the hope of cure."

NEWS

The Sixty-Seventh Annual Session of the A. M. A.—The Sixty-Seventh Annual Session of the American Medical Association will be held at Detroit, June 12 to 16, 1916. The House of Delegates will convene on June 12, and the Scientific Assembly —the Section on June 13.

A Case of Bubonic Plague in California.—The California State Board of Health reports the death of a man in Contra Costa County, from bubonic plague. This is said to be the first death from this disease which has occurred in California since October, 1913. The man is believed to have contracted the plague from ground squirrels, many of which are known to be infected with the disease.—*Medical Record.*

J. A. Majors Company Establishes Branch Office in Dallas.—The J. A. Majors Company, New Orleans, Southwestern Representatives of W. B. Saunders Company, who have been using the front page of the Journal for many years, have opened an office and store-room in Dallas for the benefit of Texas physicians. The office is located at 405-6 Juanita Building, Dallas. They will have in stock all medical books and journals published.

Mr. George Henser, who has been calling on Texas physicians for over 25 years, will continue making his usual rounds.

Southern Medical Sanitarium for Treatment of Pellagra Opened in Fort Worth.—The Southern Medical Sanitarium for the exclusive treatment of pellagra and nervous diseases has been established at Fort Worth. The sanitarium is located in what was formerly Arlington Heights Female College. The buildings have been remodeled and are modern in equipment. It is ideally located on a high hill in the suburbs, yet accessible to the business part of the city. A full staff of physicians and nurses are in attendance.

Dr. C. C. Parrish, formerly of Gainesville, is in charge of the pellagra cases, and Dr. W. C. Rountree of Fort Worth, has charge of the nervous cases.

State Dental College to Have Four Year Course. —Beginning in 1917 the course of instruction in dentistry will require the student to attend college four years. At present only three years are necessary. At a recent meeting of the board of directors of the State Dental College, Dallas, it was decided to extend the dental course to four years in 1917. This is to conform with the action taken at the last meeting of the National Association of Dental Faculties, which met in Ann Arbor, Mich., in January, 1915. Students matriculating for the session of 1915-16 will not be affected by this new ruling.

The State Dental College will open its eleventh annual session October 1, 1915.—*Dallas Times Herald.*

Post-Graduate School to Reopen.—The New Orleans Post-Graduate School of Medicine will begin its second year as an affiliated institution of Loyola University. The arrangements are under approbation of the Jesuit Order of Rome, and the formal announcement of the date of the opening will soon be made. The board of directors of the school is made up of Drs. Homer Dupuy, President; William Kohlman, Vice-President; Joseph A. Danna, Secretary; Oscar Dowling, A. Nelken, C. G. Cole, Joseph M. Elliott, O. L. Pothier and T. J. Dimitry. It was reported that the school would organize an undergraduate medical department as part of Loyola University, but this has been denied by the authorities.

Orange Conducts Rat Campaign.—At a regular meeting of the city council August 10, Dr. W. P. Coyle, city health officer, made a report of the recent inspection of the city by Dr. Minton, chief deputy of the pure food and drug commission and introduced the plan of Dr. Joseph Davis, of the state health department, to rid the city and community of rats and to improve sanitary conditions. The city acted favorably upon the plan which means that the campaign of sanitation and rat extermination is now on. Dr. Davis has secured quarters in the old McKinnin building on Front and Second streets, where he will conduct his rat laboratory, while Mr. Schlafli, expert sanitary engineer, will begin his work. The trappers, who will work under the auspices of the city and the county, have already started on their work.—*Beaumont Enterprise.*

Genius Passes.—On August 20th last, two contemporary scientists passed away, Paul Ehrlich and Carlos J. Finlay. The one was a great factor in the development of laboratory methods of bacteriologic investigation for nearly a quarter of a century and both were pre-eminent in the achievement of preventive medicine. Ehrlich's name is best known in connection with salvarsan, but in diphtheria, studies of the blood, and in biochemistry he was a great pioneer.

Carlos Finlay's death comes to us more acutely because of his relation to the discovery of the cause

of yellow fever, and even though he was eighty-two years old at his passing, he will be missed.

Both men will leave their names as monuments to the science of today and will be remembered for their accomplished tasks.—*New Orleans Medical and Surgical Journal.*

Bexar County Medical Society in New Quarters.—The new quarters and library of the Bexar County Medical Society in the Bedell building were formally opened to members at a "house-warming" given recently. The entertainment was in the form of a smoker. About 75 members of the society and a numbers of visitors attended.

Informal addresses were made by members, the majority of them extending thanks to Dr. P. I. Nixon, chairman of the library committee, who was mainly responsible for the success attained in equipping the library. Several hundred books on medicine and other branches of science are included in the collection and about 40 medical and scientific journals have been subscribed for and will appear regularly on the reading tables in the library.

A librarian has been appointed and will remain in charge of the books from 8:30 a. m. to 6 p. m., week days.

In resolutions adopted at the informal gathering, appreciation was extended to all friends of the society who have donated to the library fund. Special appreciation was expressed to the G. Bedell Moore estate, through which the society is given use of the large quarters on the second floor of the Bedell building free. Refreshments were served at the "house-warming."—*San Antonio Light.*

Several Towns Want the New Blind Asylum.—The board created by the Legislature to select a site for the new State Blind Institute, and for the establishment of which the last Legislature made an appropriation of $325,000 has had several tentative offers from different towns. This board is composed of Governor Ferguson, Attorney General Looney and Lieutenant Governor Hobby.

Under the terms of the act making the appropriation, the selection of the site is left to the board, which means that the institution may be removed from Austin.

Austin, however, may enter the competition with other points that have indicated their intention to make offers for the institution when the board considers the selection for its location.

Thus far, tentative offers have been made by Lampasas, Brownwood, Wichita Falls, Sweetwater, Valley View, Waco and Temple, and it is said that an offer is also to come from Dallas.

The offer of Temple is said to be quite an attractive one, and includes not only a suitable tract of land, but also free water for a period of twenty years.

As Temple is the governor's home town, there is considerable speculation as to whether or not he will throw his influence in favor of that town.

To give Temple the institution might cause the governor to be criticised.—*San Antonio Light.*

Medical Association of the Southwest to Meet at Oklahoma City.—The Medical Association of the Southwest, comprising the States of Oklahoma, Missouri, Arkansas, Kansas and Texas, will hold its 10th annual meeting in Oklahoma City, Oklahoma, October 12-13. An elaborate program is in preparation, and the usual large attendance is expected. The following are the section officers:

Medicine—Chairman, Dr. M. L. Graves, Galveston, Texas; Vice-Chairman, Dr. Theo. Y. Hull, San Antonio, Texas; Secretary, Dr. M. M. Smith, Dallas, Texas.

Surgery—Chairman, Dr. Joe Becton, Greenville, Texas; Vice-Chairman, Dr. W. S. Sutton, Kansas City, Mo.; Secretary, Dr. C. S. Venable, San Antonio, Texas.

Eye, Ear, Nose and Throat—Chairman, Dr. J. H. Barnes, Enid, Okla.; Vice-Chairman, not chosen; Secretary, Dr. D. D. McHenry, Oklahoma City, Okla.

Special Committee on Clinics—Chairman, Dr. M. E. Stout, Oklahoma City, Okla.

Committee on Arrangements—Chairman, Dr. D. D. McHenry, Oklahoma City, Okla.

At the last annual meeting held at Galveston, the association voted to make the *Southwest Journal of Medicine and Surgery* the official organ of this association, requiring that the advertising columns be cleared of unethical and objectionable advertising matter and the Journal placed on a high standard, which has been accomplished.

This publication is mailed to every member whose dues are paid for the year, and the expenses of keeping up the *Journal* is shared by the association and the editor. This alone is well worth the annual dues, which are $3.00.

Dr. Foscue Wins Suit Against Amicable Life Insurance Co.—Judgment for $8,000 damages was returned yesterday morning for Dr. G. B. Foscue in his $60,000 libel suit against the Amicable Life Insurance Company, and A. R. Roberts, president, and A. R. Wilson, secretary of the company. The case was tried in the seventy-fourth district court, the trial being the longest civil trial in the history of McLennan county, covering a period of almost eight weeks.

The case was a rather expensive one for the tax payers, as well as for the litigating parties. Jury fees, not paid by the litigants, will amount to almost $1,400, and other expenses will bring the total up to about $2,000. This does not account for expenses of plaintiff and defendant, such as attorneys' fees, and the necessary expenses of preparing for trial.

On February 19, 1914, Dr. G. B. Foscue of Waco, Texas, and formerly medical director of the Amicable Life Insurance Company instituted a suit in the district court of McLennan county, Texas, against the Amicable Life Insurance Company and A. R. Roberts, as president, and A. R. Wilson, as secretary, for $60,000, plaintiff alleging that the defendants had damaged him in his professional reputation, etc., on account of the publication and circulation of certain alleged libelous letters of date August 26, 1913, September 23, 1913, and February 10, 1914. The defendants in their answer admit the writing and circulation of the letters and further answered that the statements contained in the letters were made and circulated in their necessary self-defense, and in fulfillment of their duty as officers of the Amicable Life Insurance Company, and that the letters were in reply to certain statements contained in two letters issued and circulated by the plaintiff, G. B. Foscue, or under his direction, on July 26, 1913, and January 27, 1914.

On July 14, 1915, both parties to the cause announced ready for trial and after a trial lasting about eight weeks, the case was, on August 4, 1915, submitted to the jury. After deliberating for two days, the jury returned a verdict into court for the plaintiff for the sum of $8,000, from which verdict the defendants gave notice of appeal to the court of civil appeals at Austin. The defendants' attorneys express confidence in defendants' case and feel that they will ultimately prevail therein.—*Waco News.*

State Health Department to Teach Prevention of Disease in Public School.—Through the efforts of the state health department, a ten days' course on prevention of disease is to be taught in the public schools of the state.

This department has just prepared for distribution to the public schools 10 charts, 22 by 28 inches, with

a booklet of 10 lectures on the subjects pictured on the charts. This is a new departure and one which is intended to prove of incalculable benefit to the school children.

The lectures are to be delivered either by the teachers of the various schools or by the local health officer or a physician who may volunteer to deliver them. The department provides these charts as a circulating exhibit and the charts, after having been explained and the lectures delivered in one school in a community, it will be sent to another school.

The following subjects are treated in the charts:

First—Home Sanitation—The house as it should be; the model home.

Second—Stimulants—Tea, coffee, tobacco, alcohol.

Third—Personal Hygiene—Morning bath, the shoe, the clothing, the eye, the teeth, the hand, the diet, the sleeping room.

Fourth—Accidents—Burns, nail punctures, bites and stings, drowning and artificial respiration.

Fifth—Our Uninvited Guests—Flies, fleas, bedbugs, mosquitoes, lice.

Sixth—Preventable Diseases—Diphtheria, meningitis, lockjaw, typhoid fever, tuberculosis.

Seventh—Preventable Diseases—Measles, malaria, scarlet fever, small pox.

Eighth—Vital Statistics—Birth registration, notifiable diseases, death records.

Ninth—School Sanitation—The school grounds, the desk, light, heat, water supply, dry sweeping.

Tenth—Social Hygiene—The family, the neighbor, the individual, the star of chivalry.

Short, concise, pointed expressions are placed on the charts. The language used is common, every-day English. No technical or scientific terms are found in the lectures, declares State Health Officer Collins.

The pictures on the charts are placed in opposition as far as possible so as to call attention to the difference of the right and wrong involved in the subject. The object of the health department is to make the charts and lectures so plain that the pupil in the primary grades may understand the lesson to be taught.

All statistics and data is given in the lecture so that the teacher may fit the lesson to the grades being taught, and the exhibit may be used in all grades from the primary to the fourth year of high school.—*San Antonio Light.*

SOCIETY NEWS.

EL PASO DISTRICT—No. 1.

Dr. F. P. Miller, El Paso, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, El Paso, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

El Paso—Dr. C. F. Braden, El Paso; 1st and 3rd Mondays, September to May inclusive.

Reeves-Ward-Pecos—Dr. O. J. Bryan, Pecos.

BIG SPRINGS DISTRICT—No. 2.

Dr. N. J. Phenix, Colorado, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Ector-Midland-Martin-Howard—Dr. W. F. Johnston, Big Springs; 2nd Thursday quarterly.

Fisher-Stonewall—Dr. R. I. Grimes, Sylvester; 1st Tuesday in January and March.

Jones—Dr. A. McK. Jones, Anson; 2nd Tuesday monthly.

Knox-Haskell—Dr. Judd E. Hammond, Munday.

Mitchell—Dr. T. J. Ratliff, Colorado; 2nd Monday January, April, July and October.

Nolan—Dr. A. A. Chapman, Sweetwater.

Scurry-Dickens-Kent—Dr. J. M. Bannister, Snyder; 1st Tuesday in January, April, July and October.

Taylor—Dr. L. J. Pickard, Abilene; 2nd Tuesday monthly.

PANHANDLE DISTRICT—No. 3.

Dr. W. C. Dickey, Memphis, Councilor.

District Society—Dr. T. D. Frizzell, Quanah, President; Dr. J. J. Crume, Amarillo, Secretary.

Secretaries of Sections—Surgery, Dr. F. B. Bryan, Childress; Medicine, Dr. E. H. Snyder, Canadian; Gynecology and Obstetrics, Dr. B. L. Jenkins, Clarendon; Pediatrics, Dr. S. P. Vinyard, Amarillo.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Childress—Dr. F. B. Bryan, Childress; 1st Tuesday monthly.

Collingsworth—Dr. H. B. Worley, Wellington; Tuesdays.

Dallam-Hartley-Sherman—Dr. R. L. Owens, Dalhart; 2nd Tuesday.

Donley—Dr. T. H. Ellis, Clarendon; 1st Thursday monthly.

Foard—Dr. R. L. Kincaid, Crowell; 2nd Monday quarterly.

Hale-Swisher—Dr. E. F. McClendon, Plainview; 1st Tuesday monthly.

Hall—Dr. W. C. Mayes, Memphis; 2nd Tuesday monthly.

Hardeman—Dr. T. D. Frizzel, Quanah; 2nd Thursday monthly.

Hemphill-Roberts-Lipscomb-Ochiltree—Dr. H. C. Caylor, Canadian; 1st Monday monthly.

Lubbock-Crosby—Dr. J. T. Hutchinson, Lubbock; 1st and 3rd Tuesdays monthly.

Potter—Dr. J. J. Crume, Amarillo; 2nd Monday monthly.

Wichita—Dr. L. F. Stripling, Wichita Falls; 2nd Tuesday monthly.

Wilbarger—Dr. Richard W. Hix, Vernon; 3rd Monday monthly.

SAN ANGELO DISTRICT—No. 4.

Dr. S. C. Parsons, San Angelo, Councilor.

District Society—Dr. J. M. Horn, Brownwood, President; Dr. R. H. Cochran, Coleman, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Brown—Dr. H. C. Eargle, Brownwood; 2nd Tuesday monthly.

Coleman—Dr. R. Bailey, Coleman; 1st Thursday monthly.

Lampasas—Dr. W. D. Francis, Lampasas; 1st Tuesday March, June, September and December.

McCulloch—Dr. J. S. Anderson, Brady; 1st Monday monthly.

Menard-Kimble—Dr. W. M. Fenley, Menard.

Runnels—Dr. E. R. Middleton, Winters; 2nd Thursday monthly.

Tom Green—Dr. G. W. Nibling, San Angelo; Tuesday before full moon.

THE TOM GREEN COUNTY MEDICAL SOCIETY devoted its June and July meetings to social functions at different points on the Concho River, where a calf barbecue was served in June and a chicken barbecue in July.

"The more we kick shins under the festive board the less we endeavor to blacken each other's eyes or character in practice."

A full attendance of about thirty, and plenty of refreshments, combined with aquatic sports, caused three or four hours to quickly pass, and all were ready to return home much refreshed.

At the August meeting the members entertained their wives and families with barbecued lamb, and other refreshments. The regular scientific programs will commence with the September meeting.

SAN ANTONIO DISTRICT—No. 5.

Dr. W. A. King, San Antonio, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary. Next meeting will be held in Corpus Christi in September.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Atascosa—Dr. B. T. Yule, Charlotte; 2nd Tuesday monthly.

Bexar—Dr. W. H. Hargis, San Antonio; from October to May. 1st Thursday, Section on Eye, Ear, Nose and Throat; 2nd Thursday, Section on Medicine; 3rd Thursday, State Medicine, Public and Personal Hygiene; 4th Thursday, Obstetrics and Gynecology.

Comal—Dr. L. G. Wille, New Braunfels; 2nd Saturday quarterly.

Guadalupe—Dr. M. B. Brandenburger, Seguin; 1st Tuesday monthly.

Gonzales—Dr. W. T. Dunning, Gonzales; 1st Monday monthly.

Karnes—Dr. R. C. Youngblood, Falls City; bi-monthly.

Kerr-Kendall-Gillespie-Bandera—Dr. Wm. Lee Secor, Kerrville; 1st Monday alternate months.

La Salle-Frio—Dr. R. L. Graham, Cotulla; meets quarterly.

Medina—Dr. J. H. Fletcher, Hondo; 2nd Wednesday monthly.
Uvaldc-Edwards—Dr. S. B. Hudson, Sabinal; 1st Tuesday monthly.
Val Verde—Dr. D. A. York, Del Rio; 1st Monday monthly.
Wilson—Dr. J. E. Sparks, Floresville; quarterly.

CORPUS CHRISTI DISTRICT—No. 6.
Dr. W. N. Wardlaw, Corpus Christi, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary. Next meeting will be held in Corpus Christi in September.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bee—Dr. E. P. Cayo, Beeville; Monday quarterly.
Cameron—Dr. C. W. Skipper, Brownsville; 2nd Wednesday monthly.
Hidalgo—Dr. W. R. Dashiell, Mission; 5th day monthly
Jim Wells—Dr. M. J. Perkins, Alice.
Kleburg—Dr. R. L. Mathews, Kingsville.
Nueces—Dr. A. W. Davisson, Corpus Christi; 1st and 3rd Fridays monthly.
Refugio—Dr. Roy T. Goodwin, Sinton.
San Patricio—Dr. L. J. Manhoff, Aransas Pass.
Webb—Dr. E. H. Sauvignet, Laredo; 1st Wednesday monthly.

AUSTIN DISTRICT—No. 7.
Dr. T. J. Bennett, Austin, Councilor.

District Society—Dr. Z. T. Scott, Austin, President; Dr. W. A. Harper, Austin, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bastrop—Dr. P. Chapman, Smithville; 2nd Tuesday bimonthly.
Burnet—Dr. H. S. Garrett, Bertram.
Caldwell—Dr. Edgar Smith, Lockhart; 2nd Tuesday monthly.
Hays—Dr. P. J. Shaver, San Marcos.
Lee—Dr. C. M. Jones, Ledbetter; 1st Tuesday in June, September, December and March.
Llano—Dr. C. F. Darnall, Llano; 2nd Tuesday monthly.
San Saba—Dr. C. L. Behrns, Cherokee; 2nd Tuesday each month.
Travis—Dr. J. C. A. Eckhardt, Austin; 2nd Thursday monthly.
Williamson—Dr. E. M. Wood, Georgetown; 2nd Wednesday.

DEWITT DISTRICT—No. 8.
Dr. Walter Shropshire, Yoakum, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Colorado—Dr. W. G. Youens, Colorado; 2nd Wednesday February, April, June, August, October and December.
DeWitt—Dr. B. J. Nowierski, Yorktown; 3rd Wednesday monthly.
Fayette—Dr. C. M. Hoch, LaGrange.
Lavaca—Dr. Walter Shropshire, Yoakum; 2nd Tuesday monthly.
Matagorda—Dr. S. A. Foote, Bay City; 2nd Wednesday monthly.
Victoria-Calhoun—Dr. F. L. Sargeant, Victoria; 20th monthly.
Wharton-Jackson—Dr. W. B. Huey, El Campo; 3rd Friday monthly.

SOUTHERN DISTRICT—No. 9.
Dr. W. W. Ralston, Houston, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Austin—Dr. Otto E. Steck, Bellville; 1st Tuesday quarterly.
Brazos—Dr. R. J. Hunnicutt, Bryan.
Brazoria—Dr. A. J. Pollard, Alvin; 1st Thursday after 1st Monday.
Burleson—Dr. T. L. Goodnight, Caldwell.
Fort Bend—Dr. R. M. Munroe, Richmond.
Galveston—Dr. M. L. Graves, Galveston; last Friday monthly.
Grimes—Dr. E. A. Harris, Navasota; 1st Wednesday monthly.
Harris—Dr. B. T. Van Zant, Houston; every Friday night.
Madison—Dr. J. E. Morris, Madisonville; last Tuesday monthly.
Montgomery—Dr. H. W. Earthman, Conroe; 2nd Monday monthly.
Waller—Dr. R. E. Bing, Waller; 1st Monday quarterly.
Walker—Dr. J. W. Thomason, Huntsville; 2nd Tuesday bi-monthly.
Washington—Dr. R. H. Lenert, Brenham; quarterly.

SOUTHEASTERN DISTRICT—No. 10.
Dr. A. R. Sholars, Orange, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thompson, Beaumont, Secretary. Next meeting in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Hardin—Dr. Lee Selman, Olive; last Saturday monthly.
Jasper-Newton—Dr. D. McMicken, Kirbyville; 4th Wednesday quarterly.
Jefferson—Dr. B. P. Holland, Beaumont; 1st Monday monthly.
Nacogdoches—Dr. T. J. Blackwell, Nacogdoches; 2nd Wednesday monthly.
Orange—Dr. A. R. Sholars, Orange; 1st Tuesday monthly.
Polk—Dr. T. H. Bates, Camden; 1st Wednesday monthly.
Sabine—Dr. W. T. Arnold, Jr., Hemphill; 2nd Wednesday monthly.
Shelby—Dr. J. H. Windham, Shelbyville; 2nd Tuesday monthly.

EASTERN DISTRICT—No. 11.
Dr. C. C. Nash, Palestine, Councilor.

District Society—Dr. E. B. Parsons, Palestine, President; Dr. E. H. Vaughn, Tyler, Secretary. Next meeting in Palestine in September.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Anderson—Dr. E. B. Parsons, Palestine; 1st Monday monthly.
Angelina—Dr. J. C. Van Nuys, Lufkin; 1st Tuesday monthly.
Cherokee—Dr. T. H. Cobble, Rusk; 4th Tuesday monthly.
Freestone—Dr. E. V. Headlee, Teague; 1st Tuesday monthly.
Henderson—Dr. A. H. Easterling, Athens; 1st Mondays.
Houston—Dr. W. W. Latham, Crockett; 2nd Tuesday monthly.
Leon—Dr. V. L. Smith, Jewett; 1st Tuesday in April; 2nd Tuesday in October.
Panola—Dr. A. M. Baker, Carthage.
Rusk—Dr. W. P. White, Henderson; 2nd Tuesday quarterly.
Smith—Dr. L. P. Tenney, Troup; 2nd Tuesday monthly.
Trinity—Dr. W. H. Pope, Jr., Trinity; 3rd Thursday quarterly.

CENTRAL DISTRICT—No. 12.
Dr. A. C. Scott, Temple, Councilor.

District Society—H. C. Black, President; Dr. H. F. Connally, Waco, Secretary. Next meeting will be in Corsicana, July 13 and 14, 1915.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bosque—Dr. C. C. Cate, Morgan; 1st Wednesday.
Bell—Dr. L. R. Talley, Temple; 1st Wednesday quarterly.
Comanche—Dr. Charles Ory, Comanche; 1st Thursday monthly.
Coryell—Dr. Ed. Graves, Gatesville; last Wednesday bi-monthly.
Erath—Dr. S. D. Naylor, Stephenville; 2nd Wednesday bi-monthly.
Falls—Dr. Aug. Streit, Marlin; 1st and 3rd Mondays.
Hamilton—J. H. Wysong, Hico; 2nd Wednesday monthly.
Hill—Dr. J. E. Boyd, Hillsboro; 2nd Friday.
Hood-Somervell—Dr. G. D. Ross, Paluxy; Wednesday before the full moon.
Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.
Limestone—Dr. M. M. Brown, Mexia; 3rd Thursday bi-monthly.
Milam—Dr. G. B. Taylor, Cameron; 2nd Tuesday bimonthly.
McLennan—Dr. D. L. Eastland, Waco; 1st Tuesday.
Navarro—Dr. W. D. Cross, Corsicana; 1st Monday.
Robertson—A. J. Sharp, Franklin; 2nd Tuesday bimonthly.

THE NAVARRO COUNTY MEDICAL SOCIETY met August 2nd in Corsicana. The following members were present: Drs. H. B. Jester, W. D. Cross, Trim Houston, Burnett, Miller, B. F. Houston, R. N. Holloway, Harry Ezell, McClung, Hunt, Kelton, Newton, Hanks of Corbet, and McMullen of Roane. Dr. Dubart Miller was elected to membership.

Dr. Hunt read a paper on *Medical Inspection.* He said that the modern sanitary system is due to the untiring efforts of the medical profession, and that the medical profession has always led in matters of public health. He gave a history of school inspection from its inception in France in 1833, showing how Belgium, Germany, England, Japan, Brazil and

numerous other countries have appreciated and used school inspection. He said that in the United States Boston was the first city to adopt such inspection, and it has gradually spread to most of the great cities until the subject is of great importance in the leading medical journals and magazines of this country. Dr. Hunt declared compulsory school attendance makes inspection obligatory, and predicted that the day is not far distant when medical inspection of the physical being would take its place by the side of mental training. The paper was discussed at length by Dr. B. F. Houston and Dr. Newton. They agreed that the movement is in its infancy in the South and needs the support of the medical profession.

Dr. H. B. Jester read a paper on *Syphilis—The Social Evil.* He said that prevention is the only panacea. He favored physicians telling boys of the dangers of an immoral life, and instilling the truth until it becomes a part of the character of the individual to have the will power to live a pure life. He said there is a need for people to wake up before it is too late. He advocated lectures to High School pupils as one means of dissimilating such knowledge. The paper was discussed by Drs. Miller, Hunt, Kelton, Burnett, Hanks and Cross, who agreed that the disease should be controlled, treated and quarantined, as well as reported. Dr. Cross thought a law should be passed compelling such.

District Personal.—Dr. Bedford A. Kirkpatrick, a recent graduate of the Medical Department T. C. U. of Fort Worth, who has been doing laboratory and microscopic work for Dr. Eastland of Mineral Wells, has located at Rockdale, R. F. D. No. 4, in Milam County, where he will do general practice.

NORTHWESTERN DISTRICT—No. 13.

Dr. J. H. Ball, Crystal Falls, Councilor.

District Society—Dr. J. H. Eastland, Mineral Wells, President; Dr. R. A. Duncan, Graham, Secretary. Next meeting will be in Mineral Wells, October 19-20.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Baylor—Dr. C. E. Johnson, Seymour; 2nd Tuesday.
Clay—Dr. B. M. Puckett, Henrietta; 2nd Wednesday.
Eastland—Dr. W. P. Lee, Cisco; 2nd Tuesday bimonthly.
Parker-Palo Pinto—Dr. E. A. Davis, Mineral Wells; 2nd Tuesday monthly.
Stephens—Dr. J. H. Ball, Crystal Falls; 1st Tuesday quarterly.
Throckmorton—Dr. D. C. Wylie, Throckmorton.
Young—Dr. W. H. Logan, Graham; 2nd Tuesday bimonthly.

The Northwest Texas Medical Society announces the following section officers for the next meeting:

Medicine.—Chairman, Dr. W. S. Baldwin, Mineral Wells; Secretary, Dr. C. O. Terrell, Ranger.

Gynecology and Obstetrics.—Chairman, Dr. Chas. H. McCollum, Fort Worth; Secretary, Dr. E. A. Davis, Mineral Wells.

Surgery.—Chairman, Dr. C. B. Gant, Graham; Secretary, Dr. G. B. Hamilton, Olney.

State Medicine and Public Hygiene.—Chairman, Dr. L. B. Wood, Jacksboro; Secretary, Dr. W. G. Webb, Megargle.

Eye, Ear, Nose and Throat.—Chairman, Dr. Phil R. Simmons, Weatherford; Secretary, Dr. J. M. Britton, Cisco.

The next meeting will be held in Mineral Wells, October 19-20.

NORTHERN DISTRICT—No. 14.

Dr. A. W. Carnes, Hutchins, Councilor.

District Society—R. W. Baird, Dallas, President; Dr. H. L. Moore, Dallas, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Collin—Dr. E. L. Burton, McKinney; 1st Tuesday.
Cooke—Dr. J. R. Lewis, Gainesville; 2nd Tuesday.
Dallas—Dr. R. S. Loving, Dallas; 2nd and 4th Thursdays.
Delta—Dr. C. C. Taylor, Cooper; 1st Monday.
Denton—Dr. W. G. Kimbrough, Denton; Tuesday following 1st Monday.
Ellis—Dr. E. F. Gough, Waxahachie; 2nd Tuesday.
Fannin—Dr. E. H. H. Foster, Bonham; 2nd Thursday monthly.
Grayson—Dr. Davis Spangler, Sherman; 1st Tuesday.
Hopkins—Dr. J. H. Holbrook, Sulphur Springs; 1st Wednesday.
Hunt—Dr. M. L. Wilbanks, Greenville; 2nd Tuesday.
Kaufman—Dr. B. J. Hubbard, Kaufman; 1st Tuesday, February, April, June, August, October and December.
Lamar—Dr. W. W. Fitzpatrick, Paris; 1st Thursday.
Montague—Dr. C. F. Young, Bowie; 2nd Tuesday monthly.
Tarrant—Dr. J. J. Richardson, Fort Worth; 1st and 3rd Fridays.
Van Zandt—Dr. D. L. Sanders, Wills Point; 1st Friday.
Wise—Dr. L. H. Reeves, Decatur; 3rd Tuesday each month.

The Hunt County Medical Society met August 10th at Greenville. Dr. C. E. Cantrell read a paper on *Ulceration of the Stomach.* He said that since Dr. Will Mayo and others had popularized upper abdominal surgery, this condition was being studied more. The size of the ulcer varies from a pin head to a dollar, and occurs wherever the gastric juices attack the broken tissues. No differentiation can be made successfully between ulcers of the stomach and ulcers of the duodenum. These ulcers usually appear just inside the outlet of the stomach and the resultant healing causes a narrowing of the orifice. When the ulcer has been cured seven times with medicine it is time to operate. The attachment of the bowel to the stomach which should be near the lower border, and should be made with a sufficiently large opening and with the bowel crossing the abdomen from right to left. Diagnosis of ulcer of the stomach should not be made until the abdomen has been opened and the parts examined. It might be choliathiasis or ulcer of the duodenum.

Dr. C. T. Kennedy reported a patient who had gastric ulcer who took little or no food for a period of weeks and got well, probably from starvation.

Dr. A. S. McBride said that whichever the case may be, duodenal, gastric or gall bladder, it becomes surgical.

Dr. W. M. Dickens said that treatment is a very interesting subject, both surgical and medicinal. He does not think the starvation treatment is a good one. By gastric analysis one can determine, in a majority of cases, where the ulcer is located.

Dr. J. H. French said he was impressed with the necessity of surgical treatment; why grope in the dark with medicinal treatment?

Dr. M. L. Wilbanks reported that in one man's autopsies there appeared about five per cent of gastric ulcers. The differentiation of gastric ulcer from other lesions, that gave rise to a similar chain of symptoms, is not a very difficult matter. Hematosis, with a periodicity of pain, constitutes good evidence of gastric ulcer. The reason pain is felt after the ingestion of some foods and not with others, is because the painless foods are the albumenous ones, rendering the gastric juices alkaline.

Dr. Cantrell closed the discussion by saying that every case of gastric ulcer is a medical case in the beginning. It is difficult to draw the line between a surgical and a medicinal case. Gastric ulcer is always medical and only at times surgical.

Dr. C. T. Kennedy read a paper on *Caesarean Section vs. Forceps.* He said that gestation is physiological in a woman under normal conditions and should progress without any serious results. There are too many pathological conditions which may arise from conception to parturition, to obviate the necessity of interference. If more caesarean sections were done less mortality among the parturient would occur. By the use of forceps the loss of life to the baby is great, to say nothing about the injury done the mother by the traumatic use thereof.

Dr. Joe Becton said that caesarean section is done more in the East because of less prejudice there. The operation is less dangerous than the use of forceps. The indications for caesarean section are: (1) Pelvic deformity; (2) uterine neoplasms; (3) vaginal deformity from any cause; (4) eclampsia, and (5) placenta previa. The first three are usually elective.

Dr. Cantrell said that Dr. Kennedy had taken a very radical position but he could not take issue with him. All cases of obstetrics are surgical. A man must know surgical anatomy and technic and cleanliness before entering the lying-in chamber. Following the use of forceps there has been known cases where the pelvic bones were so in ured that the separation of the pubic arch caught the urethra.

Dr. M. L. Wilbanks said that he did not think every obstetrician should do caesarean section; he said there is no condition that requires more skill than an abnormal parturition, but rather than have the death of the child and brutal trauma done the mother, caesarean section should be done.

Dr. W. M. Dickens said that in Boston these sections are done to prevent pain, as society demands it. In the cases he has seen there was about a 2 per cent mortality to the mother. No obstetrician should take a case who is not able to do such work.

Dr. A. S. McBride thought the old way better, but that when a case demands it the caesarean section should be done. He has never done any great damage with forceps.

Dr. J. H. French reported a case of caesarean section done with a butcher knife, and both the mother and baby were saved.

Dr. P. A. Peak's paper on *Circumcision* was read by Mr. Fred Peak. It was discussed by Drs. M. M. Chandler, C. E. Cantrell, Dickens, Bradford, Joe Becton and C. T. Kennedy.

The secretary called the attention of the society to the advertising matter in the State Journal.

The Tarrant County Medical Society met August 6th, at the Medical College. Dr. J. S. Bardin gave an interesting account of the recent A. M. A. meeting. His remarks were confined to the Section of Diseases of Children, before which body he read a paper.

Dr. H. A. Logsden read a paper entitled *Some Practical Points in General Anesthesia*, limiting his remarks to ether and chloroform, based on the personal administration of about 1000 anesthetics. The paper was freely discussed.

The committee on resolutions on account of the death of the father of Dr. Holman Taylor, reported. The report was accepted.

The following were elected to membership: Drs. D. M. Rumph, H. V. Helbing, S. B. Miller and H. V. Johnson.

The Tarrant County Medical Society met August 20th. Twenty members were present. Dr. Geo. D. Bond presented a patient who had been before the society six weeks before. The patient was a doctor over seventy years old, who had a recurrence of a sarcoma near the stump of an amputated thigh. Seven or eight months past a tumor about the size of a hen egg was noticed in the adductor muscles, about the middle third of the right thigh; this was excised, recurred and excised the second and third times. Finally an amputation was done, leaving a short stump. The patient rapidly recovered from this but in two or three months a tumor had developed in the soft parts near the end of the stump. This tumor rapidly disappeared under *x*-ray treatment.

The present tumor is some distance removed from the one treated by Dr. Bond, and it is hoped it will respond to the treatment as readily as before.

The case was discussed by Drs. J. H. McLean and C. H. McCollum.

Dr. L. M. Whitsett presented a case, that of a young man 24 years of age, who for the past three years has suffered from a digestive disturbance, which seemed to be confined principally to the stomach. A detailed history of the trouble written by the patient was read, also reports by Dr. Whitsett of various physical and laboratory findings. The case was discussed by Dr. Harper and others. It was the consensus of opinion that his ailment was largely psychic, with some pathologic foundation.

Dr. Frank G. Sanders next reported a case which he diagnosed neuralgia parathetica.

The Wise County Medical Society held its regular meeting in August. The meeting was well attended. Dr. Bacon Saunders, Fort Worth, told of his visit to the Government Pellagra Hospital at Spartanburg, S. C., and discussed the methods of caring for the patients there. Dr. Bozeman, Fort Worth, made an interesting talk on *Pellagra*. Dr. Reeves presented a patient showing trophic nerve changes due to electricity. Dr. Braselton presented a pellagra patient. Several members discussed the subject.

District Personals.—Dr. S. A. Woodward, Fort Worth, has returned from a vacation spent at points on the coast. He was accompanied by Mrs. Woodward and the children.

Dr. Giles Day, Fort Worth, has returned from post-graduate work at Harvard University. He took courses in histology and embryology.

Dr. Bacon Saunders, Fort Worth, attended the recent annual meeting of the Association of Railway Surgeons, which met in Washington, D. C.

Mrs. Ellen (Henderson) Van Zandt of Fort Worth, wife of Dr. I. L. Van Zandt, died August 22. She was born in Shelby County, Texas, August 16, 1845, and was, therefore, 70 years and 6 days old. She was married to Dr. Van Zandt, April 9, 1867.

Mrs. E. H. Cary, wife of Dr. Cary of Dallas, was operated on at Battle Creek the latter part of July, while on a visit there.

Dr. W. A. Duringer, Fort Worth, has returned from a vacation spent at Minocqua, Wisconsin. He also attended the annual meeting of the Association of Railway Surgeons at Washington.

Dr. Kent V. Kibbie, Fort Worth, has returned from a trip to Chicago, where he took post-graduate work.

Dr. P. J. Fullingim, Decatur, was recently elected health officer of Wise County.

Dr. J. M. Inge of Denton, President-Elect of the State Medical Association, was a guest of the Wise County Medical Society at its July meeting, where he delivered an address. He also delivered a public health address at an open meeting.

Drs. Walker, Petty, Reeves, and Assistant State Health Officer Lincecum, delivered public health addresses to the students of the summer normal.

Ralph, the 18 year old son of Dr. B. M. Jones of Rhome, has recovered from a prolonged siege of typhoid fever.

Mrs. W. C. Huddleston, wife of Dr. Huddleston of Newark, died in July.

Dr. G. G. Castleberry, Ben Wheeler, with some friends, recently made an auto trip to the Panama Exposition.

Drs. J. D. Covert and Henry Trigg, Fort Worth, recently made an automobile trip to Jackson, Michigan.

Drs. Wilmer Allison and Bruce Allison, Fort Worth, have returned from a vacation trip to Colorado.

Dr. J. W. Head, Fort Worth, is recovering from a prolonged attack of septicemia, contracted while operating.

Dr. C. F. Hayes, Fort Worth, has returned from a fishing trip.

Dr. J. J. Richardson, Fort Worth, is in Chicago, for post-graduate study. He is accompanied by his wife.

NORTHEASTERN DISTRICT—No. 15.

Dr. W. H. Blythe, Mt. Pleasant, Councilor.

District Society—Dr. C. A. Smith, Texarkana, President; Dr. J. N. White, Texarkana, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bowie—Dr. E. M. Watts, Texarkana; 4th Friday.
Camp—Dr. R. Y. Lacy, Pittsburg; 1st Wednesday.
Cass—Dr. J. T. Herndon, Linden; 1st Wednesday.
Franklin—Dr. Z. C. Fuquay, Mount Vernon; 1st Tuesday.
Gregg—Dr. W. D. Northcutt, Secretary.
Harrison—Dr. J. B. Baldwin, Marshall; 1st Tuesday.
Marion—Dr. S. A. Miller, Jefferson; 1st Thursday monthly.
Morris—Dr. R. C. Farrier, Omaha; 1st Tuesday quarterly.
Titus—Dr. W. H. Blythe, Mount Pleasant; 2nd Tuesday.
Upshur—Dr. T. S. Ragland, Gilmer; 2nd Tuesday.
Wood—Dr. V. E. Robbins, Quitman; last Friday monthly.

THE TITUS COUNTY MEDICAL SOCIETY met in Mount Pleasant, August 10th.

The President, Dr. A. A. Smith, was sixteen miles away, bewailing an accident to his flying machine—so he couldn't be on hand. The Vice-President, Dr. D. M. Leftwich, may have been in San Francisco—we don't know. He was not on hand. But, our old president, Dr. J. S. Miller, was present in the trenches, and he was elected president pro-tem. Also present: Drs. Miller, Johnson, Fleming, Broadstreet, Grissom and Blythe.

The members had under consideration for quite a while, our STATE MEDICAL JOURNAL, with special reference to the advertisements.

The subject of pellagra held the attention of the members for the greater part of the meeting. Also, sick stomach and abnormal labors were subjects of considerable discussion, resulting from case reports of Drs. Grissom and Fleming, respectively.

Business, medical subjects and doctors running short, adjournment was taken at 3:45 p. m.

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

W. H. HARGIS, President.....San Antonio.
W. H. BLYTHE, Vice-President.....Mt. Pleasant.
H. L. WILDER, Secretary-Treasurer.....Glen Rose.

CHANGES OF ADDRESS.

Dr. J. S. Rogers, from Woodsboro to Frisco.
Dr. J. E. Johnson, from Mexia to Kirven.
Dr. M. C. Van de Venter, from San Marcos to New Braunfels.
Dr. E. Guajardo, from Kingsville to San Antonio.
Dr. F. W. Stoltje, from Wootan Wells to Waco.
Dr. J. F. Taylor, from Briggs to Hamlin.
Dr. B. C. Grant, from Fort Worth to Big Lake

NEW AND REINSTATED MEMBERS, AUGUST 1 TO SEPTEMBER 1, 1915.

Bexar County—Emma T. Miller, San Antonio.
Caldwell County—T. H. Harrell, Gonzales.
Coryell County—L. S. Mahon, Jonesboro.
Denton County—C. F. Card, Justin.
Fayette County—I. E. Clark, Schulenburg.
Hunt County—S. D. Fry, Lester; G. W. Luckey, Wolfe City; E. R. Whitley, Commerce; J. J. Handley, Josephine.
Jones County—W. J. McCreight, Anson; Jno. E. Morris, Spur; J. H. Grace, Spur; T. H. Blackwell, Dickens; R. J. Blackwell, Hawley.
Lavaca County—Paul Renger, Hallettsville.
Lubbock-Crosby County—A. B. Lynch, Littlefield; C. J. Wagner, Lubbock.
Matagorda County—Henry Braddock, Wadsworth.
Nacogdoches County—C. H. Tindall, Appleby.
Navarro County—Dubar Miller, Corsicana.
Red River County—R. A. Dinwiddie, Clarksville.
Tarrant County—D. M. Rumph, S. B. Miller, H. V. Johnson, H. V. Helbing, J. W. Shoemaker, Fort Worth.
Taylor County—C. M. Cash, Abilene.
Tom Green County—Bascom Lynn, San Angelo.

THE ELIMINATION OF ADVERTISING IN COUNTY SOCIETIES.*

BY

W. H. HARGIS, M. D.,

SAN ANTONIO, TEXAS.

The elimination of advertising by the members of a County Society, is a task of no small proportion. The magnitude of this curse which has so insidiously grafted itself upon the medical profession, is fully recognized by the American Medical Association, and in its promulgation of the principles of medical ethics this subject is touched only in its broadest sense, the final control being left to local societies. It is here that the society strikes its first snag, what is advertising and what constitutes an ethical card? According to Webster, who is generally acknowledged as an authority on such matters, the word "advertise" means, "To give publicity to one's business." Therefore, a card in the paper is advertising, regardless of its size or wording. In this advanced day of commercialism, when all progressive business men adhere to the slogan, "It pays to advertise," it is hard to convince ourselves that the practice of medicine is established on the traditional basis of honor, honesty and confidence, and that any exploitation of one's virtue brings down condemnation and loss of confidence, as his reward. The so-called ethical card is the missing link between the clean, ethical physician who stands for a profession that in the past was a symbol of honesty and purity, and the rank advertising faker who has trampled under foot all semblance of honor, honesty and purity, and who doesn't care whether he cures or not, so long as he can increase his bank account with ill-gotten gains.

I maintain that there is no such a thing as an ethical card. It makes no difference whether an ad consists of two lines or two pages, the principle prompting its publication is the same, namely, to give publicity to a business, and according to Webster, this is advertising. What is the difference, from the standpoint of ethics, between the full page ad of the fake genito-urinary specialist, containing his photograph and a long list of ailments which he guarantees to cure after all others have failed, and the two line card of an ethical physician, simply saying that he is "Dr. John Doe, Genito-Urinary Specialist, 1000 Blank Bldg.?" The difference is this, the full page ad gets the business and the other doesn't, because the average intelligent person cannot differentiate between a regular and an irregular card, and if he believes in the principle of a physician advertising himself, he will go to the one who has the largest and most attractive ad, and if he doesn't believe in it, he will class both as fakers and go to one he can trust.

Therefore, the first step towards eliminating this custom is to show that it does not pay to advertise. In substantiation of this claim, I will cite the case of a new comer to our city, who believed that it was a curtailment of his personal liberty to forbid him to carry a card in the paper, and rather than

*Read before the State Association of County Secretaries, State Medical Association of Texas, Fort Worth, May 5, 1915.

give up this evidence of his personal liberty he remained out of our society and inserted a perfectly "ethical" card in the paper, stating that he was Dr. Doe, Physician and Surgeon, Office 711 Blank Bldg., calls answered day and night. Phones so and so. I requested this physician to make inquiry of all new calls, to ascertain how much good this card did him. In three months time he declared that he had not to his knowledge made one dollar from his card in the paper. Any one who is skeptical of this statement, can prove it out by carrying a card for a few months.

The Bexar County Medical Society having no law covering advertising, amended its by-laws the latter part of 1912, and that portion covering this subject now reads as follows:

"A member who is guilty of a criminal offense or of gross misconduct, either as a physician or as a citizen, or who violates any of the provisions of this Constitution and By-Laws, shall be liable to censure, suspension or expulsion. It shall be considered gross misconduct within the meaning of this section for any member:

"(1) To carry a display or other advertisement in any secular newspaper or other publication intended to circulate among the laity, except a brief notice, to run for a period not to exceed ten days, for the purpose of announcing a change in location or a change in any firm or partnership, or to give notice of a contemplated absence of a week or more, or to give information of the return of a physician to his or her office after an absence of a week or more.

"(2) To employ printed or engraved cards, circulars, stationery or any other advertising matter, so worded as to be misleading or in any way similar to the boastful announcements or advertisements of the quack doctors, or which contains more than his or her name, medical title, address, office hours and branches to which his or her practice is limited.

"(3) To print or allow to be printed, in any publication intended to circulate among the laity any interview, paper, article, or other communication, the chief object or most likely result of which will be to attract attention to the physician's skill or professional attainments, rather than to benefit the public.

"(4) To take advantage of his or her connection with any public office, corporation, hospital, sanitarium or any social, charitable, political or other institution or organization, to advertise directly or indirectly his or her professional skill or attainments."

This law covers the entire field of advertising, and we have something tangible to work on. Our members were given one year from January 1, 1913, in which to close up their contracts and get used to their new clothes, as it were. "The curtailment of personal liberty" argument had worked over time, and some of our members went so far as to say that they had always carried a card, that the State Society and the A. M. A. do not consider it unethical and that they questioned the right of the local society to make it so. Some even went so far as to say that they would withdraw from the society. I am glad to say that most of our members were well accustomed to their new clothes before the year was up, and the only one who withdrew is now one of our most efficient members.

To eliminate advertising you have simply to prove that it doesn't pay, and this can be done by making careful inquiry of all new calls, thereby ascertaining how much comes from the "ethical" card.

In conclusion, I wish to say again, that an ad is an ad and that there is no such thing as an "ethical" card or advertisement.

DEATHS

Dr. M. B. Grace of Seguin, died in the Sunset Hospital, Houston, July 26, following an operation on the gall bladder.

He was born at Hico, January 22, 1868, where he grew to manhood, and later married Miss Dora Bailey. Receiving educational training in the country schools and also from his father, who was a Methodist minister, he entered the Southwestern University at Georgetown, Texas, in 1886. After several years of preparatory work he began the

Dr. M. B. Grace.

study of medicine in the Galveston Medical School, where he graduated in 1890. He served one year as interne in the Island City Hospital, after which he entered private practice at Walnut Springs, there following his profession with zeal and energy for eight years, moving to Seguin in the summer of 1899.

Being full of enthusiasm and love for his profession, he soon established himself in the entire community, and gained the love and respect of every citizen of Guadalupe County. Not only did he take a great interest in his profession, but also in the municipal affairs of his town and county. He was known as a man conscientious in his principles and loyal to his friends and the profession. Throughout the state he was known by the medical profession as a strong educator and ardent worker, and a strong believer in organized medicine. He always attended the annual meetings of the State Medical Association and held several positions of trust and honor; the last two years serving as chairman of the Committee on Life Insurance.

Dr. Grace was a member of the First Methodist Church of Seguin, in which he held several positions of trust and honor. He was a member of the W. O. W., M. W. W., K. of P. and Guadalupe Lodge No.

109, A. F. & A. M., the latter body conducting the funeral exercises.

Dr. Grace enjoyed a wide circle of friends and acquaintances, all of whom revere and cherish his memory.

Dr. G. A. Hofstetter of Corsicana, died at his home July 16, aged 44, of Bright's disease. He was a graduate of the University of Michigan, Ann Arbor, 1897. He had practiced in Corsicana since his graduation, and was a member of the county and State Medical Associations, and was a Fellow of the A. M. A.

Dr. J. A. Holloway of Round Rock, died of diabetes July 19, aged 62. He graduated in medicine from the University of Louisiana, March 15, 1878. He was a member of the Williamson County Medical Society from the date of its organization in 1901, until about two years ago when he was transferred to Travis County.

BOOK NOTES

A Text-Book of Surgery for Students and Practitioners.—By. George Emerson Brewer, A. M., M. D., Professor of Surgery, College of Physicians and Surgeons, New York; Surgical Director, Presbyterian Hospital; Consulting Surgeon, Roosevelt Hospital, assisted by Adrian V. S. Lambert, M. D., Associate Professor of Surgery, Columbia University; Attending Surgeon, Presbyterian Hospital; and by members of the surgical teaching staff of Columbia University. Third edition, thoroughly revised and rewritten. Octavo, 1027 pages, with 500 engravings and 23 plates in colors and monochrome. Cloth, net, $5.50. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

Prof. Brewer's work on operative surgery has been a standard since its initial issue, and this edition has been so thoroughly done that its contents present a new and valuable text for the student who is desirous of the last word on all the phases of really modern surgery.

The list of collaborators contains the names of Auchincloss, Burnap, Clarke, Corscaden, Darrach, McCreery, Matthews, Peck, Pool, Russel, Sloane, St. John, Whipple and Whitman.

The book is divided into 33 chapters, many of them new and all others entirely revised and rewritten, under the personal supervision of Dr. Brewer. They contain elaborate and clear discussions of every phase of modern surgery, with the correlated sciences, such as infection in its surgical relations, inflammation, tumors, shock and allied conditions, surgical technic, anesthesia, treatment of post-operative conditions, injuries and diseases of the skin and subcutaneous tissues, surgery of the pericardium; injuries of the lymphatic system, injuries and diseases of the muscles, tendons, fasciae, the nerves, the head and brain, the spine, face and neck; oral, nasal, and pharyngeal cavities, injuries of the thorax, pleura and lungs, malformations and diseases of the mammary glands, injuries of the abdomen, diseases of the kidneys and ureters, injuries and diseases of the bladder and urethra, of the penis and scrotum, of the testicle, seminal vesicles and prostate, of the rectum and anus, of bone, joints, hernia, amputations and deformities and their correction.

Dr. Brewer is entirely qualified as a teacher, as a surgical practician and as a writer; and the coterie of collaborators and assistants he has attracted to his side are all men of note, actively engaged in both practice and teaching, and fully acquainted with the recent advances in the theory and practice of surgery.

The book is a mechanical beauty, well bound in cloth, printed in 10 point type, leaded and on good paper. It is illustrated in colors and monochrome plates, representing the always excellent work of the publishers.

Exercise in Education and Medicine. By R. Tait McKenzie, A. B., M. D., Professor of Physical Education, and Director of the Department, University of Pennsylvania. Octavo of 585 pages, with 478 illustrations. Philadelphia and London. W. B. Saunders Company, 1915. Cloth, $4.00 net; half morocco, $5.50 net.

It is but four years since the first edition of this book was offered to the profession, when it was immediately accorded a high position among the high class literature; it had to be reprinted about a year later. The revision of the entire work is the result of a continued heavy demand.

Dr. McKenzie is perhaps the best qualified man living to issue an authoritative work upon his subject, being much engaged in that line. He is a sculptor of skill and ability, and being a physician of superb qualifications he is able to draw the lines between the mere athlete and the well proportioned, manlike form.

The book is divided into two parts, and thirty-three chapters. Part One discusses Exercise in Education, and Part Two deals with Exercise in Medicine. The text is designed to help in the education of the physically weak in the development of immature muscles.

It is well known that the work of the lay physical culturists, in their strenuous methods of "development," have actually increased the mortality rate among their disciples. The most favorable expectation of life is among those who gain their muscular development from the exercises of normal occupations, such as farming, mill work, and so on. That a certain amount of physical exercise is essential to the proper development of children and young people in school is true, and that such exercise should be scrupulously attended to in the school curriculum is vital. To do this properly it is imperative that competent medical supervision be had, even though the actual physical exercise and training be left for the teachers.

The best system yet developed for the symmetrical growth of the human body, is manual training in the schools. Gymnastics are excellent and healthful amusement, but they are often overdone; not so in manual labor and training, especially in the productive occupations, where the pupil is taught the art of making and the science of designing implements of utility and beauty.

The book under notice is of the greatest value to physicians, teachers, school directors and parents.

The mechanical make up of the volume is good.

The Commoner Diseases, Their Causes and Effects. By Dr. Leonhard Jores. Translated from the German by William H. Woglom, M. D., Assistant Professor in Columbia University, etc., New York City. With 259 figures in the text. Price $4.00. Philadelphia and London. J. B. Lippincott Co. Copyright, 1915.

This is a rare, good book. The author has changed the usual order of the writers, by first describing the anatomical pathology, and the conditions and their sequelae. The physiological changes following anatomical deviations are carefully considered and the text is elaborately illustrated with 250 cuts, many of them in colors. The book is printed in 10 point, leaded, on good paper, and is substantially

bound in cloth. There are thirty-four chapters devoted to the common diseases incident to all ages and conditions, and the text is the result of the author's lectures on pathology in the University of Marburg.

The studious physician will get the value of his money and time in this volume.

Applied Immunology. The Practical Application of Sera and Bacterins, Prophylactically, Diagnostically and Therapeutically, with an Appendix on Serum Treatment of Hemorrhage, Organotherapy and Chemotherapy. By B. A. Thomas, A. M., M. D., Professor of Genito-Urinary Surgery in the Polyclinic Hospital and College for Graduates in Medicine; Instructor in Surgery in the University of Pennsylvania; Associate in the William Pepper Laboratory of Clinical Medicine and R. H. Ivy, M. D., D. D. S., Assistant Instructor in Surgery in the University of Pennsylvania; Instructor in Genito-Urinary Surgery in the Policlinic Hospital and College for Graduates in Medicine, Philadelphia. 5 colored inserts and 68 illustrations in the text. J. B. Lippincott Company, Philadelphia and London. 1915.

The preface of this book declares that "despite the enormous strides, experimentally and clinically, that have marked the progress in serological and bacteriological research in medicine for the past quarter of a century, leading to results of the highest clinical value diagnostically and therapeutically, three facts stand out in bold relief: First, that the average practitioner's knowledge of biological therapeusis is a 'dangerous thing' because he does not 'drink deep of the Pierian spring'; second, insufficient practical instruction is given to students in our medical schools in view of the prevalent practice of this mode of diagnosis and treatment; third, authors have sadly neglected to give a concise presentation of immunology in its entirety for the practical grasp and comprehension of students and practitioners.

"The result of the above has been that pharmaceutical firms have assumed the function of the Department of Therapeutics in our medical colleges, not always impartially and to the best interests of medical science. Obviously, licentiates to practice medicine should receive instruction of a definite and practical nature in this important branch of modern medicine, or immunology should receive a place in the classification of specialties, a fact which the importance of the subject may demand."

Until about a score of years ago next to nothing had been understood about immunity, and much yet remains to be learned. The application of preventive and curative therapeusis is set forth by the authors of this book, with the desire to aid the student and practician in their daily labors of study and practice. Their order is sequent and easy; clear in statement, definite in essential details, and correct in technic. The book will prove of value to the laboratorian of limited resources, who is determined to be correct in his interpretation of biodynamic phenomena. The authors are men of achievement in their line, commanding the respect of men of learning everywhere.

Modern Aspects of the Circulation in Health and Disease. By Carl J. Wiggers, M. D., Assistant Professor of Physiology in Cornell University Medical College, New York City. Illustrated with 104 engravings. 8vo., pp. 374, cloth. Lea & Febiger, Philadelphia, 1915. Price $3.75.

This is one of the books that is sure to be hailed with pleasure by the student and practician. While there has of late been much valuable literature published on the subject, the study of the circulation has been so prolific of new and startling discoveries that each successive utterance from the great laboratories is heard with interest. The equations of blood pressure, and other phenomena of the circulatory system, have been rendered so simple and sure as diagnostic measures that with sphygmomanometer, stethoscope, hematocrit and microscope, the interpretation of the hematologic and lymphatic changes are exceedingly accurate. The profession is awaking to the importance of a science which at the beginning of this century was anticipated only in the sanctum of the laboratory recluse, and Dr. Wiggers and the publishers are to be thanked for bringing to us such a splendid work.

Surgery of the Blood Vessels. By J. Shelton Horsley, M. D., F. A. C. S. Surgeon in Charge of St. Elizabeth's Hospital, Richmond, Va.; A Founder and Fellow of the American College of Surgeons; Ex-President of the Richmond Academy of Medicine and Surgery; Member of the Southern Surgical and Gynecological Association, etc. Illustrated C. V. Mosby Company, St. Louis, 1915.

Dr. Horsley has in this contribution to the very sparse literature on the subject, done the profession and the science of medicine a great service, and we predict a prompt exhaustion of the first edition.

About eighteen years ago Dr. Murphy of Chicago, did the first successful end-to-end suturing of a severed blood vessel, and set the pace for the surgery of the blood vessels. The subject has since received the attention of able surgeons, but little permanent literature has as yet appeared. This volume brings to the subscriber all that has been deemed important of recent developments in this field and it will be found of great value to all who are to keep themselves ready for emergencies in blood vessel surgery.

A Practical Treatise on Diseases of the Skin. By Oliver S. Ormsby, M. D., Professor of Skin and Venereal Diseases in the Rush Medical College, Chicago. Octavo, 1168 pages, with 303 engravings and 39 plates in colors and monochrome. Cloth, $6.00, net. Lea & Febiger, Publishers, Philadelphia and New York.

Dr. Ormbsy is recognized as one of the world's leading dermatologists, and this volume is a succinct statement of his wide experience and efficient knowledge of dermal affections.

The description of cutaneous diseases is sufficient to be of value in the use of those who have to meet the demands of almost daily contact with them; and due attention is given to the newer methods of diagnosis and treatment, together with the later classifications and nomenclature.

This is perhaps the latest work on the subject, and should be in the hands of all, whether student, specialist or general practician.

The mechanical execution of the book is all that is needed, and the subscriber will be pleased and rewarded for his purchase.

BOOKS RECEIVED.

Fractures and Dislocations. *Preston* (C. V. Mosby Company.)

Text-Book of Surgery. *Brewer* (Lea & Febiger.)

Synopsis of Medical Treatment. *Shattuck* (W. M. Leonard.)

Practical Medical Series:

Pediatrics-Orthopedic Surgery, Vol. V, 1915. *Abt-Ridlon.*

Habits that Handicap. *Towns* (Century Company.)

The Cancer Problem. *Bainbridge* (McMillan.)

Texas State Journal of Medicine

HOLMAN TAYLOR, EDITOR-IN-CHIEF.
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VOL. XI. OCTOBER, 1915 No. 6

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

THE SOUTHERN MEDICAL ASSOCIATION TO MEET IN DALLAS.

The Southern Medical Association, the regional organization covering the sixteen Southern States, will meet in Dallas, November 8th, 9th, 10th and 11th, with two days of specially arranged clinics to follow. It will be recalled that the State Medical Association of Texas, by unanimous action of the House of Delegates, at Houston last year, formally invited this great organization to hold its 1915 meeting in this State, the guest of the Dallas County Medical Society. The project of holding this meeting so far from the centers of Southern medical activity was startling to those of the profession who have been accustomed to look upon the "South" as bounded by Kentucky on the North, Alabama on the South and Mississippi on the West, and we are told that it was no small task to overcome the opposition to this departure from the rule. It was urged with some force, that there were so few members in this region that the session would necessarily be poorly attended. This argument was successfully overcome by a pledge on the part of the Texas members present at the meeting, that they would add to the Association a thousand members in Texas; and so, we will have the honor of entertaining at this time more notable physicians than have ever before been gathered together at one time in this State. That the Association will be successfully entertained in Dallas, is already an accepted fact to those of us who are acquainted with the profession and citizenship of Dallas. Success was indicated from the beginning by the entertaining activity of those who undertook to secure the favor. The fight was waged by a delegation of Texas physicians headed by Drs. E. H. Cary of Dallas, and Frank D. Boyd of Fort Worth. They were aided, as a matter of course, by the civic bodies of the city of Dallas, and not the least effective of the several agencies put forward was a letter presumed to have been written by the Secretary of the Dallas and Fort Worth Funeral Directors and Embalmers' Association, and signed, "The Last Man Called," from which we quote the following paragraphs:

"Boyd and Cary may have forgotten to mention the most remarkable phenomenon that occurs in all nature and may be seen every fair day in Dallas, namely, that the sun rises in the East just outside of Dallas, and sets on its Western horizon.

"Assure the members of the Association that we will be delighted to make liberal contributions for their entertainment and to aid in arranging daily clinics for them. Tell them to come and bring their surgical instruments, medicine and medical appliances. Send Cary, Boyd and all other Dallas and Fort Worth doctors home as soon as possible. Business has been bad enough on account of the war, but since they left there is nothing doing with us. We cannot live without them. We learn that all the members of the Bankers' Association who were recently in Richmond want to move there, but 'for the love of Mike' send our doctors home."

Arrangements for the meeting have been practically concluded, and embrace the following items:

A sacred concert will be given at the Scottish Rites Cathedral Sunday evening, November 7th, from 3 to 5; public health sermons will be delivered in several of the principal churches during the regular church hour in the evening, by visiting physicians hereafter to be selected. On Monday, the 8th, the opening day of the session, the ladies will be entertained with an

automobile tour in the afternoon, which will embrace all of the points of interest in and about the city, and which will probably include several special entertainments *en route;* later in the evening, the ladies will be entertained with a theater party at the Majestic. There will be a public health lecture at the First Presbyterian Church at night, which will be followed by a smoker and lunch for the men at the Adolphus Hotel. Tuesday afternoon the visiting ladies will be entertained at the Dallas Golf and Country Club, with a musical and luncheon. There will be another public health lecture in the evening, following which the President's reception and a dance will be held at the Scottish Rites Cathedral, beginning at 9:30. This event is for everybody. At noon on Wednesday, the ladies will be entertained at a luncheon at the Lakewood Country Club. In the evening, beginning at 7:30, the ladies will be entertained at a bridge party at the Adolphus, while the men are enjoying a luncheon at the Scottish Rites Cathedral. The program of entertainment is so arranged, it will be noted, as not to interfere with the regular proceedings of the Association.

In this connection, it is perhaps well to observe that registration, both for members and visiting ladies, will be by card. That is, members will use their membership card in registering for themselves, and their wives and ladies will use the same card in registering for the several entertainments to which they will be eligible. It would be unfortunate and quite embarrassing, should there be a number of visiting ladies present without the right to register, and members and prospective members are urged to care for this situation in advance.

The list of clinics is not yet quite complete, but they will be conducted by the local profession at the City Hospital, St. Paul's Sanitarium, and Texas Baptist Memorial Sanitarium. They will begin at 9 a. m., Friday, and will continue through both Friday and Saturday, embracing a great variety of subjects, both medical and surgical, including the several specialties. It is expected that the hours assigned to the local profession will be divided with the visiting celebrities, and those who choose to remain for the clinics may rest assured that they will be highly entertained. Already, arrangements have been made with Dr. Seale Harris, of Birmingham, Alabama, Secretary of the Association and Editor of the *Southern Medical Journal,* to conduct a pellagra clinic, Saturday, beginning at 10 a. m., at the Texas Baptist Memorial Sanitarium. Dr. C. M. Rosser is planning to provide a breast amputation for Dr. Rodman, and any one having a suitable case for this purpose is urged to communicate with Dr. Rosser without delay. Facilities for exhibiting clinics are, of course, relatively limited, and those who expect to attend any of them are requested to communicate as soon as possible with Dr. Elbert Dunlap, giving an idea of the class of clinics desired. Dr. Dunlap will undertake to see that each one so writing will receive tickets to the proper clinics.

Membership in the Southern Medical Association is limited to members of the several State associations within its jurisdiction, and the membership fee is $3.00. The *Southern Medical Journal* goes to each member without additional charge. Those desiring membership are requested to communicate with Dr. O. M. Marchman, Dallas, Chairman of the Membership Committee.

The JOURNAL is pleased to give this much space to this subject, both for the information of its readers and for the good of the order. The State Association has officially invited the Southern Medical to meet within its jurisdiction, and we are certain the entire medical profession will feel honored and be delighted to extend the right hand of fellowship and a warm welcome to our brethren of the Great South. Dallas is ready and waiting, and the following chorus to a song they sing, to the tune of "Tipperary," is indicative of their spirit:

"It's a fine time you'll have in Dallas,
It's a short trip to go;
You will meet there all the 'Big Ones',
That you'd surely like to know.
We will greet you when we meet you,
In the good old Texas way;
So be sure to come and visit Dallas,
And join the S. M. A."

THE CONTROL OF PAPERS READ BEFORE COUNTY AND DISTRICT SOCIETIES.

It is generally conceded that a medical society has a right to demand jurisdiction over any contribution to its scientific program.

Indeed, it formally was the rule to vote upon each paper, immediately that it had been read, as to whether it should be accepted by the society and opened for discussion. In those days a majority of the societies published their transactions in book form, and this procedure served a double purpose. Later, medical societies began to adopt "official organs," and even to publish their own proceedings in the form of periodicals. The formalities of the case soon gave way to the practical understanding that all contributions were to go to the "official organ," and that eligibility for publication would be decided by the publication committee or the editor. When the "reorganization" took place, about fifteen years ago, it was generally provided that any paper read before a State Medical Association should have first been read before a county society, then a district society, in order that it might be matured, and that these subordinate bodies might pass upon its eligibility for a more honored place and a wider presentation. It soon transpired that the requirement as to district societies was rather impractical and the custom was abandoned; and, as a matter of fact, most of the State Association papers are at the present time read before county societies by title only. This is, of course, a subversion of the fundamental idea and the practice is to that extent faulty, which is beside the point.

In the early days of the reorganization, our transactions were published in book form, and it made little difference whether county societies had permitted the previous publication of papers ultimately reaching the State Association, and the question was probably not raised. Since the adoption of the journal or periodical plan of publishing the annual transactions, which includes, of course, the papers read before the scientific sections, there is a difference which must be considered. The Association does not desire to publish a second rate journal, and no first rate journal will publish articles that have appeared elsewhere, except they are of peculiar merit and of such distinction as to warrant the republication. But the question arises, whether a county or a district society has the right to make such disposition of papers presented to it as it sees fit. Ordinarily this would be true, but the circumstances under which they are presented make a difference. Section 4, Chapter X, of the Association By-Laws, definitely states that all papers presented before the Association must first have been read before a county society. Section 6, of the same chapter, includes the following sentence: "Papers previously published as original in other medical publications shall not be eligible to publication in the TEXAS STATE JOURNAL OF MEDICINE, except on direction of the Board of Trustees." The exception noted is, of course, intended to cover papers of such moment that they cannot afford to be passed. Very few papers of this character are read before any society.

Now, under these requirements, what is a members going to do about it, if a county or a district society insists on retaining exclusive jurisdiction over his paper, and perhaps submitting it to some publication other than the STATE JOURNAL? It would seem reasonable to grant the author exclusive control over his paper, that he may subsequently present it to the State Association, as contemplated by the laws of our Association. Of course, no well meaning society will deny an author this right, and the few cases in which there has been a violation in this manner of the rights of the author and of the Association, have occurred because of a lack of understanding of the situation. We certainly cannot blame the editor of an enterprising publication who published such a contribution, for he is in active competition with the STATE JOURNAL, and entitled to publish the best he can get, thereby attracting subscribers, and through the subscriber advertising patronage. We must blame, first, the author for not informing the Secretary that his paper is intended for ultimate presentation to the State Association; second, the secretary of the organization in question, for not ascertaining this fact, and third, the editor of the publication, for not finding out from the author whether he is willing that his paper should be published in the manner intended.

We are moved to these observations by the fact that one of the most interesting and valuable papers read before the recent annual session of the State Medical Association, cannot now be published in the STATE JOURNAL, except as a reprint, because it has appeared elsewhere in print following its presentation to a district society. When the attention of

the author was called to this fact, he was very much surprised, and among other comments relative to the situation, had the following to say: "The publication of my paper read before the.....district society, and entitled .....in the....., was without my knowledge or consent." The author evidently did not anticipate that the secretary of the district society in question would make this disposition of his paper; the secretary probably had no idea that the author intended it for presentation to the State Association, and the editor of the publication in question doubtless considered that the secretary had ample authority to submit this particular paper for publication wherever he chose. The result of the situation is, that the author is denied a much wider circulation of his paper than he will get under the circumstances, and a large proportion of our readers will be denied the pleasure and profit that would come of its perusal. We respectfully call the situation to the attention of all concerned, that the circumstance may not be repeated.

THE ART OF PUBLICITY FOR CONTRIBUTIONS TO SCIENTIFIC LITERATURE.

It is not sufficient to thoughtfully work out an idea bearing on some problem of science; the result of the endeavor must be made known to those who are interested, and eventually it must find lodgment in the permanent archives of science, where it will be useful to other thinkers and investigators. One must know how to do this to advantage, not only for personal reasons, but for the good of science itself. It is not sufficient to get a contribution of this character in print; it is all important as to the nature and scope of the publication in which it is printed. Those of our number who are thoroughly versed in this phase of the procedure accomplish their object more readily and are more generally considered as authorities, than those who do not. We may properly say, then, that the work of publicity closely approximates an art. An author who carefully prepares a paper on some scientific subject, reads it before a county or district society and then hastens into the first printed page that offers itself, regardless of character or scope of its circulation, may be wasting his efforts. If his contribution is intended strictly for local consideration, or for limited circulation, or for some other limited purpose, this procedure may be entirely suited to his needs; but if the paper is designed for a permanent place in medical literature, it should have the widest publicity possible and should appear in good company. As already observed, no high grade publication will republish articles, unless they are of exceptional value and for that reason requiring republication; hence the importance of being extremely careful in this particular. We speak now strictly from the standpoint of opportunity for publication.

There is another phase of the situation. We speak of "good company" in a publication. All students of medical literature make the early observation that there are certain writers who seem to prefer to antagonize established principles and go counter to current opinions, and they may or may not be correct in the position they maintain. Many of these are almost invariably wrong in the position assumed, and essentially antagonistic in their attitude. They are against constituted authority, established principles, and anything that the great majority of their fellows are for. These may be termed scientific anarchists or, at least, iconoclasts. Contributions from them find ready place in established medical literature when their observations are reasonable or of constructive character; unsupported and unpleasant contentions receive, on the contrary, little consideration. There are certain publications, both national and local, which make a specialty of accommodating this type of contributions. These are probably edited by physicians of the same mental trend, or cater to this class of writers because of their influence in the matter of building up subscription and advertising patronage. A conservative and constructive writer will do well to avoid this class of journals, for fear of being discredited by the company he keeps. The lesson taught us in the long ago by the "Poor dog Tray" fable, must not be forgotten.

There is still another phase of the situation. There are publications established and maintained primarily and solely for the advertising income that may be secured. They are, to say the least of it, not particular in regard to the

character of advertising accepted for publication. In their advertising pages we find not merely those simple remedies that have failed to secure a place in New and Nonofficial Remedies, nor even those that have been condemned because of the unethical manner of their advertising, and the preposterous claims made for them, but those which are at times, and in addition, essentially harmful and dangerous. In other words, they assume the position of "Let the purchaser beware," an attitude which has long ago been abandoned even by the respectable lay press. These publications will frequently accept almost anything that will fill their reading pages, regardless of scientific principle or ulterior purpose. These publications are, usually, very antagonistic to organized medicine, largely, no doubt, because organized medicine has interrupted their pleasant little game. An author should, of course, avoid this type.

We desire to be not misunderstood in this connection. We hold that all medical journals which offer their pages indiscriminately to the advertiser, do so because they need or desire the money. They are not all wilfully antagonistic, and many of them would abandon their present advertising policy if they could be assured of legitimate support otherwise; and many of them are edited, and even owned, by physicians who are in their private practice essentially ethical, and high class, and in their personal dealings genial and of the highest personal character. We have no fault to find with these, or even with their publication, choosing rather to assume the attitude of confidence in ultimate reform. We believe many of these will work out their destiny to successful, ethical perpetuity, and are willing to await the time with patience. However, the steady increase in the number of journals which refuse to accept unethical proprietaries in their advertising columns, is forcing this class of advertisers to concentrate on publications not quite so particular, and this is daily drawing the line of demarcation so clearly that the ethical proprietaries will be forced by opinion to abandon them entirely, which will make a reform in advertising policy more and more difficult. Practically all of the State association journals have adopted the higher standards of medical advertising, but the number of so-called independent publications that have done so can almost be counted on the fingers of one hand. But times are changing, and the opinion of the profession is fast crystalizing around the central idea that an ethical medical journal must not only be clean in its reading pages, but in its advertising pages as well. A lack of care in the selection of material for one, will be considered indicative of a similar lack of care in selecting material for the other.

THE FUNCTION OF THE STATE JOURNAL.

It is only within recent years, and possibly since the reorganization, that State associations have entered the field of medical journalism. The former custom of printing the transactions in book form was found to have many defects, not the least of which was that it failed to make anything like a full and complete record of the medical history of the territory it presumed to cover. It is perhaps true that in many instances the best medical thought of the country was recorded in these old volumes of transactions, but it is likewise probably true that much of the really interesting and profitable medical history has been lost or scattered among the various and diverse medical journals existing at the time. The medical profession has gradually come to an understanding that medical literature has a higher purpose than mere commercialism, and that whatever it is, it belongs to the profession itself. The spirit of co-operation has gradually pervaded the ranks of the medical profession, and not the least important opportunity for co-operation lies in the field of medical journalism. And who is there to say that the medical profession is not entitled to any profit which may come from the literature it produces? The volume form of published transactions was an expensive proposition, and there was no compensating advertising income; not only that, but, as already observed, many interesting items of a personal and miscellaneous character that are now saved to prosperity were irretrievably lost. And so it happens, that wherever the field is sufficiently encouraging the State associations have adopted the plan of publishing their transactions periodically, which constitutes the so-called "State Journals."

As is well known, this evolution did not take

place without much dissention and more misunderstanding than would now seem possible. Some ill feeling was engendered, most of which, fortunately, has disappeared. There is still some resentment and opposition, because of the unyielding attitude of many of those who are responsible for the change in policy and the invasion of a field of endeavor which had for so long been appropriated by the individual, and mainly for commercial purposes. Except for the matter of ethics, mainly as it relates to the subject of proprietaries and their advertising propaganda, there can be no antagonism and no destructive competition between *State journals* and the so-called *independent journals,* they each have a distinct field to occupy, and the continued existence of the independent publication depends upon economic necessity for it in the particular field it assumes to occupy. If it has a distinct mission, and is edited in a worthy manner, it will hold its ground and grow in the favorable estimation of the medical profession, and for that reason will be able to command a liberal and legitimate advertising patronage. Such a publication will be in a position to say and do things which the State journal cannot say and do. It represents the opinion of its editor, which is a personal matter, and with which the profession is at perfect liberty to agree or disagree. On the other hand, the State journal is presumed to represent the majority opinion of the entire profession, with which opinion the editor may many times be in personal disagreement. There are many differences of opinion among the members of a State medical association, with which the editor cannot deal freely, but which badly needs the editorial consideration of someone whose business it is to keep informed on such matters. Here the independent journal may perform a real service, and it often does so.

The primary function of the State journal is to make a record of the medical history of the territory covered, which history includes the papers presented before the association and its subordinate bodies; medical discoveries and the results of medical research; the subjects covered by the several subordinate bodies in their scientific sessions, together with such of the subject matter as will prove interesting currently and subsequently, and such references to the project of medical science and economics as may be feasible and possible under the circumstances. The function of the independent journal is somewhat similar, but with the difference that a wider range of selectivity is granted by the freedom from these restrictions.

It is unfortunate that the State journal has not always sufficient funds at its command to publish all of the really good papers that are read before the subordinate bodies, and the necessity of caring for these productions, such as are not intended for the scientific program of the State association, and for which room cannot be found in the State journal, constitutes one of the recognized demands for the independent medical journal. Somewhat in this connection, *The Medical Herald,* a publication which we admire principally for its audacity in claiming to be ethical, raised a point which deserves to be considered. It says:

> "A journal of wide circulation is usually selected by a doctor who has a paper he desires to publish. Why? Because if his paper is printed in a 'Bulletin', or in a 'State journal', the paper does not reach beyond the confines of his own city or State, and is read by no one outside the membership of the particular society of which the journal may be the 'official organ'.
>
> "What's the use? Why limit the circulation of a good paper by printing it in any medium, however excellent it may be, the distribution of which is limited to any one State?"

We have referred to this matter before. Any paper presented before the State Medical Association, which contains such matter that it should receive prompt general circulation throughout the medical world, is promptly relinquished to the author for distribution to a publication of national or international circulation, if it is acceptable, provided the publication in question is both reputable and ethical. It will not be voluntarily relinquished to any other kind, certainly not to one which claims to be national and is so only in the sense that it has a few subscribers scattered here and there throughout the country. Most State journals are carefully scanned by those who are interested in the progress of medical science, and any article of this character appearing in any of them will be speedily abstracted and directed into the proper channels. It is certainly much better that a paper of this

character be thoroughly circulated at home and receive scant attention abroad, than that it should receive scant attention abroad and scant attention at home. Most of us in Texas would prefer to have our contributions thoroughly discussed within the borders of the State, than to have them noticed at random throughout the country and not thoroughly discussed anywhere. The matter of reprints and exchanges will take care of our requirements abroad, as a rule.

The fight on State journals, which happily is dying out, has been lead by those antagonistically inclined to constituted authority and efficiency in executive control, in which many well disposed individuals have joined through misapprehension. Sarcasm and innuendo has failed in its purpose, and today the State journals stand forth, as a rule, clean, ethical and efficient publications. There is doubtless room for improvement, and publication committees are seeking out and correcting daily the faults incident to their particular system of control. They are daily becoming more independent, and are more and more doing their own thinking. There is no danger in this, provided the principles at stake are kept well in mind. There will be no divergence of opinion of any material character, either between the several State journals, or the State journals and *The Journal of the American Medical Association,* to which we all look for inspiration. No longer will such facetious appellations as "State Echoes," given us by the *Journal of the National Association of Retail Druggists,* in its constant derision of the ideals of the medical profession, or "Tentacles of the Octopus," of such ancient lineage that we are not sure from whence it came, be in any sense tolerable. The medical profession is fast coming into its own, and the matter of medical journalism will eventually be under the same control at the hands of the rank and file, as the subject of medical education seems to be.

We repeat, there can be no antogonism between State journals and the so-called independent journals, except on the basis of ethics, and we submit that advertising of proprietary preparations which have not only been condemned by the Council on Pharmacy and Chemistry of the American Medical Association, but which have been shown to be essentially harmful as well, is in contravention of medical ethics, and should not be engaged in by an ethical medical publication.

THE FUNCTION OF THE COUNTY SOCIETY BULLETIN.

The original county society bulletin, according to our information, is *The Medical Program of the Medical Organization of Washington County, Pennsylvania.* It has remained a four-page publication since the beginning, and contains each month a brief reference to what was done by the society during the preceding month, what is expected to be done during the forthcoming month, and what of interest is occurring in the county in the meantime. There is also included a miscellaneous collection of pertinent observations on various subjects, original and selected, and there is usually one or two very much restricted (as to space) advertisements. There is no effort at "literature," and the whole affair has essentially a local, personal atmosphere that is quite attractive. This is our idea of the function of a county society bulletin.

Texas has probably the most ambitious and effective county society bulletins of any State in the Union, and the amount of good they may accomplish for the local organizations is without limitation. We do not desire this observation to serve as a criticism or in any way to discourage the efforts of the societies in the publication of these most excellent periodicals. We merely call attention to the possibility of doing more than is required, and to a certain amount of lost motion, which it would be well to take up. Publishing a bulletin is an expensive matter, and in proportion to its extensiveness, and only by the aid of advertising patronage can a bulletin of much more than four pages in size be made to conform to the financial status of the average county society. This effort to secure advertising patronage leads to two things, either to a division of the legitimate business of this character possibly to the extent that it will serve no publication to real advantage, or to the acceptance of unethical advertising, which is still more to be deplored. Of course, if a bulletin aspires to the dignity of medical journalism, that is another problem entirely, and it remains only to consider whether an additional medical journal in the

particular territory involved is worth while and to the advantage of the medical profession to which it will appeal. It is generally conceded that the medical profession is already overburdened with medical journals, even of the most excellent type, and certainly a medical society should go slow in adding to the burden. And while this is a matter mainly for the consideration of the local profession, the ultimate effect on the STATE JOURNAL, in which we are all vitally interested, of a multiplicity of organization publieations laying claim to the current medical literature and the available advertising patronage, must be considered. No local society would consider for a minute doing anything that would injure the STATE JOURNAL, and we are not afraid that they will. We merely call attention to the possibilities of the situation.

It must be remembered, also, that the bulletins, many of them, have a national circulation, at least in the matter of exchanges, and original articles printed therein are abstracted and quoted generally when they are of special moment. This makes it impossible for the STATE JOURNAL to publish any original contribution that has appeared in a county society bulletin. We repeat, we are proud of our county society bulletins, and we have no desire to curtail their activities and their ambitions, in the least. The scope and character of these publications must always be governed by the county society itself, and we are only anxious that this be done with a due regard for the greater good of the greater number.

TRADE JOURNALS.

Af first glanee there seems to be a legitimate field for the circulation of what we may term "Trade Journals." Here and there in medical literature will be found from time to time references to products put out by different manufacturing concerns, which the manufacturer might legitimately collect in pamphlet form and mail out to the profession somewhat as a reprint, or, as some of them are doing, periodically as a sort of medical journal. With these extracts and abstracts might legitimately go a certain amount of comment from the manufacturer's point of view. This is actually done in certain instances, and apparently in good faith. With these publications we have no fault to find, except that they are in extremely bad company. The trouble is, many of the manufacturers do not confine their comment to legitimate bounds, and the abstracts quoted may be from articles that have been inspired, and perhaps have received publication in journals of unsavory reputation. This combination is apt to mislead the unwary, and these publications are a burden to the mails and to those to whom they ultimately come. There recently came to our reviewing table in one batch, four of these publications, all of them containing a little desirable literature, just enough to serve as a vehicle for the special efforts of the manufacturer to foist upon the attention of the reader preparations not acceptable to the advertising pages of ethical medical journals. *The Bacterial Therapist* contains a very poor argument for the indiscriminate used of mixed vaccines, among other items we might legitimately criticise; *The Metabolist* discusses from the various angles the line of preparations put out by G. W. Carnick Company, and which have not received the sanction of the Council on Pharmacy and Chemistry of the American Medical Association; *The Od Quarterly* presents a variety of discussions of preparations that have been roundly and justly criticised by the Council, and *The Kirby Instrument* editorially recommends the use of venarsen, a preparation of arsenic and mercury, which it says "is in no sense a substitute for salvarsan or neosalvarsan; rather, it seems in several important respects, a distinct improvement over any similar preparation which has, thus far, been offered for professional use." Our readers will recall that *The Journal of the American Medical Association* exposed this nostrum, showing it to be a simple solution containing approximately 9 grains of sodium cacodylate, 1/40 grain of mercury "biniodide," and ¾ grain of sodium iodid to each full dose. It is hardly to be considered that a well informed physician will resort to the intravenous use of this product as a specific for syphilis, even though the European war has made it practically impossible to obtain salvarsan or neosalvarsan, and the *Kirby Instrument* suggests a "thorough trial of 'Venarsen,' believing that it will completely justify the claims of its manufacturer." We note, also, that "further information on 'Venarsen,' especially some re-

ports on guinea pig experiments that have been conducted," will be furnished on request. We wonder if the report of the Council on Pharmacy and Chemistry of the American Medical Association will also be supplied on request. There is so much good, dependable medical literature that it would seem gratuitous to circulate many of these trade journals. If the manufacturers have any products they desire to advertise to the medical profession, let them conform to ethical standards and present them through the advertising pages of reputable medical journals.

THE NEW JERSEY JOURNAL CLEANS UP.

Among the several lively publications that come to us each month, *The Journal of the Medical Society of New Jersey* has always proven to be one of the most attractive. We have on more than one occasion wondered why the New Jersey State Medical Society did not conform its advertising policy to that adopted by practically all of the other State journals, which is the standard of *The Journal of the American Medical Association.* While the advertising pages were apparently governed with some consideration for the ethical side of the question, many indeterminate and nondescript proprietaries, the worst offense of which is that they refused to conform to any standard set by the medical profession in the matter of ethical control, were included, and this failure on the part of New Jersey to support a vital principle, for which we were all fighting, always appeared singular. New Jersey is a small State, the profession not numerous as compared with some of the other States, and their journal rather an ambitious effort in view of these facts. The advertising field open to them at the time was rather remunerative, and there was strong doubt as to whether sufficient support could be secured from the strictly ethical concerns, to continue their publication up to the usual standard. Under such circumstances the problem arises, whether it is better to violate one phase of medical propriety in order that certain benefits may be derived in other directions, or whether it is better to forego these benefits and observe the propriety in question. We are pleased, indeed, that the New Jersey Society has finally decided to hew to the line and let the chips fall where they may. They have adopted the advertising policy of *The Journal of the American Medical Association,* and henceforth we can be proud of their publication without reserve.

And so the fight goes on. There are now twenty-five State journals with the standard advertising policy, and five or six independent journals. This out of 350 medical publications in the United States!

THE MEDICAL PICKWICK.

This is a publication designed to fill a unique place in medical literature. It is intended primarily to entertain the physician, and it will discuss any subject in which he is interested, except those pertaining to technical matters. It has so far been rather interesting and entertaining, and the novelty of the publication has doubtless appealed to a wide range of readers. However, there will be an awakening unless the advertising policy is changed somewhat. If we are any judge of the temper of the rank and file of the medical profession, such violence to ethical medicine is not going to be put up with always. The first advertising page we come to bears the advertising of Glyco-Thymoline. Antiphlogistine, Gray's Glycerine Tonic Compound, Tongaline, Peacock's Bromides, Prunoids and Pasadyne, also find a harbor in the hospitable pages of this publication. It would almost seem that the *Medical Pickwick* is designed as a sort of haven for outlawed proprietaries. It is to be sincerely regretted.

THE CALL OF THE COUNTY SOCIETY.

Now that vacation is over and the usual routine has again been taken up, let us not forget the claims of our county society. Judging from the dearth of the county society reports, there has been very little activity during the summer months, and it is high time that we again get busy. The refreshing influence of vacation and the invigorating weather of the fall and winter months, should enable us to make the forthcoming meetings of our society successful in the extreme. We owe a great deal to our county society. If it has been successful, we have been benefited by it in many ways; if it has not been successful, we are largely at fault. In either instance we are called upon to acknowledge and repay an obligation. Social functions, the theater, and even the movies, may entertain us, and from them we may even profit; but they are all optional. The county society, if it is managed properly, will invariably both entertain and profit us, it is *not* optional. By all means, let us resolve to regularly attend our county society meetings, beginning with the very next one.

ORIGINAL ARTICLES.

BRAIN AND SINUS COMPLICATIONS OF OTITIS MEDIA, WITH SPECIAL REFERENCE TO SYMPTOMATOLOGY.*

BY

ALBERT H. ANDREWS, M. D.,

CHICAGO, ILLINOIS.

The prevalence of purulent otitis media with the constant danger of intra-cranial complications, the serious consequences of failure in the diagnosis and proper treatment, the brilliant results of proper management in some cases together with the freely confessed lack of accurate working knowledge on the part of many, justifies the frequent and careful consideration of this subject.

The literature of the subject is abundant. Journal articles, text-book articles and monographs, are appearing frequently. Noted writers of the past and present have contributed their share to the general knowledge of the subject, but I make no claim to originality and am not concerned with the matter of priority or credit to other writers. Indeed, I suspect that should one take this paper and compare it with the literature, nothing might be found that had not been already published.

No accurate data on the frequency of these complications is at hand. In certain large and special hospitals, records have been kept and calculations have been made, but it must be remembered that these cases have been under the care of physicians especially interested in the subject, and the proportion of complications has undoubtedly been modified by better than usual care of the ear, preventing or lessening the frequency of complications. Physicians who constantly work in hospitals are prone to forget that hardly half of the people of this country have access to hospital accomodations in emergency sickness. Since the isolated practitioner is as likely as the otologist to find complications following ear disease, it is important that both shall be qualified to recognize the indications of approaching trouble in time to give the patient a reasonable chance for his life.

When one considers the close proximity of the middle ear and the mastoid cells to the cranial cavity, and the open pathways from the one to the other, the wonder is that the brain is not found more frequently involved.

The question of how infection reaches the deeper structures has been the subject of much study and probably more speculation.

When in operating we find necrosis of the inner table and an extra-dural abscess adjacent to it, the explanation is easy, or if the dura shows pathologic changes and an abscess is found within, the explanation still presents no difficulties.

If the lateral sinus is bathed in pus, or the wall is broken down, or the mastoid emissary vein shows disease, no one is surprised to find a thrombus present.

When a patient with a suppurating ear complains of vertigo, nausea and vomiting, and this is followed by meningitis and death, the explanation, in the light of recent studies of the labyrinth, again becomes easy.

But when the wall of the lateral sinus is bathed in pus and the sinus is not diseased, or when the dura is in contact with pus for a long time and is not apparently inflamed, or when we find well marked and perhaps fatal disease of the brain or sinus and are not able to trace the line of communication from the suppurating ear, then we are compelled to admit that there are several things we do not know.

There are three general classes of intracranial complications, namely, abscess, meningitis and sinus thrombosis. They usually appear independently of each other, but any two or all three may be found simultaneously.

Abscess within the cranial cavity may be extra-dural, just within the dura, or deep within the tissue of the brain itself. Extradural abscesses are not likely to produce any characteristic symptoms. It is probable that more of these abscesses are discovered while operating than are diagnosed previous to operation. This class can be dismissed with the statement that if the abscesses are found and drained, they do not materially complicate or add to the danger of the operation. They usually communicate directly with the mastoid abscess and the thorough operator is in little danger of overlooking them.

The symptoms produced by the intra-dural abscess are similar to those produced by the deeper brain abscess, and are sufficiently characteristic to cause the surgeon to at least suspect their presence and to search accordingly. When the bone is removed from over one of these abscesses, the dura is bulging and discolored. A free incision with provision for drainage, is sufficient.

The deeper brain abscess is usually caused by infection passing through the dura and into the depths of one of the sulci, where it sets up a local inflammation and becomes circumscribed by the adhesions between the two adjacent layers of the pia in the more superficial part of the sulcus. The symptoms produced vary according to size, location and rapidity of formation. Exceptional cases have been record-

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ed of very large brain abscesses producing no symptoms, or symptoms so slight as to attract no attention, at least for a long time. As a rule, the symptoms are distinctly characteristic but they will be discussed in comparison with the other intra-cranial complications.

Meningitis of otitic origin is classified as serous and purulent. Each of these may be general or localized, and may originate in the cerebrum or cerebellum. The differential diagnosis between the purulent and the serous type is not always easy. Someone has suggested that if the patient recovers from meningitis he had the serous type, while if fatal he probably had the purulent form. With the advent of blood examinations and spinal puncture, the points of differentiation are much more pronounced. Probably the most fatal form is that resulting from extension of a purulent labyrinthine disease, through the internal auditory canal to the meninges in the cerebellar fossa.

In acute purulent otitis media with meningeal symptoms, the blood findings are complicated by the ear disease and it is impossible to determine whether in a given case the variation from the normal is due to conditions within the brain or to conditions in the middle ear and mastoid. With the meningeal symptoms occurring after the mastoid has been exenterated and free drainage established, blood findings are of greater value. In spinal puncture three things are to be considered, the intra-cranial pressure, the gross appearance of the fluid, the chemical reaction and the microscopic examination of the fluid.

With increased pressure, a turbid fluid, variations from the normal chemical reaction, and the presence of bacteria in the spinal fluid, the indications of a hopeless diffuse purulent meningitis would be complete.

Frequently, however, the pathognomonic symptoms are not present or the physician is not prepared to make the necessary examination. Then he must depend upon the general indications, which subject will be discussed later.

In discussing the differential diagnosis of the different intra-cranial complications, it is my plan to change the usual order and consider the variations produced by meningitis, brain abscess and sinus thrombosis, and the symptoms common to each.

Headache is a symptom characteristic of each, but in meningitis it is general, frontal or occipital in the beginning, according to the origin of the trouble, whether in the cerebrum or the cerebellum. It is made worse on turning in bed, or if the patient can sit up stooping increases the discomfort. In brain abscess the headache is usually severe in the beginning, growing less as the case progresses, but increasing as the case approaches a fatal termination. Throughout the whole course of the disease, it is lateralized to the affected side, and sometimes but not always, it is referred to the immediate neighborhood of the abscess. In sinus thrombosis the headache is lateralized and seems to extend down the side of the neck. Sometimes the patient cannot tell where the headache ends and the pain in the neck begins. In any case of persistent pain in the head, associated with a suppurating ear, suspicions of intra-cranial involvement should be aroused and a careful examination should be made.

In meningitis the temperature is uniformly high, 102° to 105° during the course of the disease, and sometimes going to 107° or higher, as the end approaches. In brain abscess the temperature is low, normal or subnormal, to 101°. In sinus thrombosis the temperature fluctuates sharply from the neighborhood of normal to 106°. The fluctuating temperature is one of the characteristic symptoms of sinus thrombosis.

The pulse in meningitis is rapid, hard and tense and later becomes thready, while in brain abscess the pulse is soft and slow, becoming rapid upon slight exertion. It is not uncommon for the pulse to go as low as fifty, while the temperature may be up to 100° or even higher. The exertion of turning over in bed will sometimes send the pulse up to 80 or 90. The pulse condition is probably the most characteristic symptom of typical brain abscess. In sinus thrombosis the pulse corresponds to the temperature as the temperature goes up, but there is still an increase in the pulse rate when the temperature becomes low. In sinus disease the character and rapidity of the pulse rate do not differ from that found in ordinary profound infections.

In meningitis there is increased sensitiveness to light, sound and touch, especially in the beginning of the attack. Later, because of pressure, all are diminished. In brain abscess the special senses begin to be impaired early, because pressure symptoms are among the first indications of abscess formation. Even though the opposite ear has been normal the patient will experience difficulty of hearing and will have to be spoken to loudly. In sinus thrombosis the special senses are not materially affected.

In meningitis, both the conjunctiva and the fundus are congested, and in the vast majority of instances there is optic neuritis or choked disc, while in brain abscess choked disc is observed in about half the cases. Authorities differ regarding the eye changes in sinus thrombosis, some claiming that there is usually choked disc and others that there is never choked disc, except when the mininges are involved. My own experience is that in sinus thrombosis not complicated by other intra-

cranial lesions, choked disc is rarely seen.

In meningitis an initial chill is quite common. In brain abscess chills are unusual, and if occurring at all, it is always at the beginning; in sinus thrombosis, chills are the rule and they are followed by high temperature. Of all the symptoms of sinus thrombosis, probably chills with sweating and great fluctuations of temperature are the most pronounced.

In meningitis there is frequent vomiting, projectile in character, without nausea. In brain abscess vomiting is unusual, but occurs sometimes, especially when the abscess is located in the cerebellum. When vomiting occurs in sinus thrombosis, it is not projectile and the patient is nauseated.

The skin shows vasomotor changes in meningitis, especially that condition called *tache cerebrales*. In brain abscess there is no change in the condition of the skin and none in sinus thrombosis, unless it be the petechiae or herpetic eruptions.

The reflexes in meningitis are always disturbed. In the beginning the knee jerk, skin reflexes and pupillary response to light, are increased, the König sign is present and the response of the patient to sudden light and sound, especially the latter, is greatly exaggerated. A sudden bright light is intolerable and patients have been known to spring from the bed because of sudden noise. In brain abscess the reflexes may be slightly increased in the beginning, but as the pressure becomes greater the normal reflexes become less marked or they may entirely disappear.

Rigidity and soreness of the muscles of the back of the neck, with burrowing of the head into the pillow, is a well known and characteristic sign of meningitis, while in brain abscess groups of muscles may be paralyzed from central pressure. When this occurs it helps to locate the abscess. In sinus thrombosis with jugular phlebitis, there is soreness and stiffness of the sternocleidomastoid muscle.

The course of diffuse purulent meningitis is always toward fatal termination, usually in from two to sixteen days. The most common immediate cause of death is pressure paralysis of the respiratory centers. The course in brain abscess is slow but always fatal, unless relieved surgically. Sinus thrombosis is usually fatal unless relieved surgically, the usual termination being pneumonia or pyemia. If the clot within the jugular softens and floats away *en masse*, it enters the right auricle, passes to the right ventricle, then out through the pulmonary arteries to the lungs, where it sets up a fatal pneumonia. If the thrombus softens and floats away in a fluid state, the infection may pass through the lungs and the case terminate in pyemic abscesses or general empyemia. In these cases the patient may possibly recover if the infection is not too great or an abscess does not form in some vital part.

Having given the unusual classifications, taking the symptom as a basis and showing how the symptom is produced or affected by the different diseases, I will follow the usual order and give an outline of the symptoms the different diseases produce.

The symptoms of meningitis are usually ushered in by headache, especially at night, with restlessness, irritability and a slight elevation of temperature. The onset of the disease is marked by one or more chills, with increasing temperature, rapid pulse, increased sensitiveness to light, sound and touch. Projectile vomiting, exaggerated reflexes and increasing pain in the head, mark the progress of the disease. This is followed by delirium, frequently strabismus, the conjunctiva becomes congested and there are changes in the fundus of the eye. After a longer or shorter period these distressing conditions are followed by coma, involuntary evacuations, sometimes by convulsions and finally by death. When the physician is compelled to stand by and see a patient die in this way, realizing his utter helplessness when once the meninges become involved, he is justified in his resolution to take better care of his own ear cases and to do everything in his power to keep other physicians from permitting their cases to reach this unfortunate termination.

The symptoms of brain abscess are usually divided into four classes, the initial, the latent, the active and the terminal symptoms. The initial symptoms are not unlike those in the earlier stages of meningitis, but instead of progressing to the later stages the patient seems to be better and may even be up and around again. In the second or latent stage, the symptoms are very obscure, mainly loss of appetite, sleeplessness and general depression. This is followed by indications of increased intracranial pressure. The slight elevation of temperature, slow, soft pulse, increasing upon exertion, impaired mental activity, impaired vision, loss of hearing in the opposite or normal ear, with frequently paralysis of groups of muscles and disturbances of speech, mark the progress of the third stage, and the gradual increase of these conditions point toward the fourth or terminal stage. If the condition is long continued, the patient has lost flesh and strength until he is but a shadow of his former self. The pulse may now become rapid and irregular, and the respiration slower and even stertorous in character. Death may result from exhaustion, from meningitis caused by a rupture of the abscess into one of the ventricles, or extension of the abscess to the corticle meninges.

A typical case of sinus thrombosis begins

with marked elevation of temperature, usually preceded by a chill. This may be repeated at irregular intervals of from a few hours to a few days, until pneumonia or pyemia are added to the sinus disease. There are many atypical cases—cases in which a thrombus is found upon operation, which had shown none of the ordinary symptoms, or there may have been a chill with an elevation of temperature and then everything remain quiet for a week or more, when the chill and temperature are repeated. This is explained by the theory that we may have a thrombus not infected, or that it may have foci of infection within it which at intervals break and turn loose a quantity of infectious material into the blood stream.

When a patient with a sinus thrombosis is not operated upon the case usually terminates fatally, either from pneumonia, pyemia or meningitis. Complications, however, rarely arise in less than three days after the first chill. This gives the surgeon plenty of time to consider his course of action but whatever he does, whether surgical or otherwise, the case should not be allowed to drift blindly along, but should have the benefit of a carefully considered diagnosis and the prompt application of sound principles in meeting the requirements of the conditions present.

ABSTRACT OF DISCUSSION.

Dr. John H. Foster, Houston, said: Dr. Andrews has so completely covered the symptomatology of brain and sinus complications that there is little left to add. The only point that I wish to stress is that often the tendency is to defer operative interference until it is too late. There is no place where it is more essential for one to make up his mind promptly and act with despatch. By doing so a fatal termination may be avoided. I appreciate this paper very much.

Dr. John O. McReynolds of Dallas, said: Knowing of Dr. Andrews' active work, I especially thank him for coming to our meeting and reading this paper. These conditions give me the most solicitude in children. They are unable to make plain their sensations, and I have known them to be treated for days or weeks for pneumonia or bronchitis, when suddenly some slight discharge from the ear directs attention to this region, and brain complications may set in before the true condition is suspected. In the beginning of these cases, it may be difficult to tell just where the trouble lies.

Dr. J. J. Crume, Amarillo, said: I wish to report two cases of mastoiditis with brain complications. The first case was sent to us with a history of discharging ear for about sixty days. We insisted that he submit to operation, but he would not do so. He was out about a week, and felt better. He returned the second week and at 9 a. m. was feeling well. At 4 p. m. he had a chill and became unconscious. Operation was done at 8 p. m. The patient died the next afternoon. The next case was that of a man sixty years old. He had high fever and fell unconscious. Post-mortem showed both mastoids full of pus.

Dr. R. B. Sellers, Fort Worth, said: I thank Dr. Andrews for his paper. I wish to report a case of bilateral otitis media with eye complications, closing the left eye. Both ears were discharging profusely and the patient had all the symptoms of mastoiditis. The second day after his admission to the hospital, all pain over the mastoid ceased. Pus seemed to have collected in the orbit, but an incision above the globe revealed none. When the eye was enucleated, it was found to be full of pus and the optic nerve was degenerated. Within forty-eight hours after doing the mastoid operation on this patient, he was able to come to the office. This case was seen also by Dr. K. H. Beall and Dr. Gough.

Dr. W. E. Howard, Dallas, said: I shall report two cases, to show how temperature runs in different cases. Case 1 had a small amount of pus and debris, with small area of necrosis, but large pressure area. Temperature was 107°. There was complete relief after evacuation. Case 2 had suffered with otitis three weeks, showing symptoms of mastoiditis. Operation revealed large, burrowing abscess, involving a large area under the sternocleidomastoid muscle. Evacuated two or three ounces of pus, yet the temperature was only 99.2°.

Dr. J. W. Head, Fort Worth, said: I enjoyed Dr. Andrews' paper. In closing, I would like for him to discuss the surgical aspect of these cases. I was most interested in the differential diagnosis as presented by Dr. Andrews. I wish to report a case that had been treated by a physician for malaria. The patient had chills and fever. Brain complications arose and a diagnosis of mastoiditis was made by me. The patient would have a chill and then go off into a stupor. These symptoms worried me considerably. Operation on the mastoid revealed a pool of pus, and the inner table of bone, the size of a half dollar, gone. I did the complete labyrinthine operation, cleaned out the wound with bichlorid solution and did a blood clot dressing. Fearing a thrombus might be present, I exposed the lateral sinus and lifted the vessel out of its bed and examined it for a sinus thrombosis, but finding none I closed with a blood clot dressing. There was no rise of temperature and union was by first intention.

Dr. W. D. Jones, Dallas, said: I was most interested in the symptoms differentiating between acute mastoiditis and brain lesions. It is in these difficult cases that we must depend on conditions found at operation and the persistence of the symptoms afterwards. With reference to Dr. Head's case, will say that it was a most peculiar sinus, in that it could be lifted out of its bed and examined. I wish to take issue with Dr. Head on the advisability of completely closing the wound over exposed dura and sinus.

Dr. Andrews, closing, said: When there is streptococcus infection, there is high temperature, small quantity of pus, great amount of infiltration and little destruction of bone. In staphylococcus infection there is a large quantity of pus, low temperature, little infiltration and great destruction of bone. One point seems to be overlooked, that is, if there are bone particles in the discharge from an ear, there is mastoid involvement. Stain with hematoxylin and wash; if there is bone debris, it will show as black specks in the field of the microscope. In such event, go into the mastoid at once. If a painful mastoid suddenly ceases to give pain, it means that there is rupture of the bony wall and operation is at once imperative. You cannot always tell whether or not the lateral sinus is involved, simply by looking, but by stroking you can discover any thrombus that may be present. I believe in the blood clot dressing in the mastoid operation, but would advise against the use of antiseptics in the wound; not even water should be used. A thorough operation should be done and the wound let alone, unless there is positive indication for opening it.

ACCESSORY SINUSITIS.*

BY

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It is an interesting fact that accessory sinus empyema almost never occurs before the age of puberty; hence it must be largely due to the fact that the sinuses are rather late in their development. At birth the antrum of Highmore is a slit-like cavity not exceeding 3 by 7 mm. At the age of 6 it has changed to a round cavity about 5 by 8 mm., and thereafter it gradually develops into a pyramidal cavity whose average size in the adult is about 25 by 32 by 38 mm.

The frontal sinus is absent at birth and until about the sixth year. It is then developed between the plates of the frontal bone as an invagination of the ethmoid cells, and attains full size and dimensions about the age of puberty. A frontal sinus of average size measures about 18 by 26 by 32 mm.

The ethmoid cells are practically absent at birth, and are developed during infancy and childhood, by protrusions from the nasal cavity into the cartilaginous ethmoid. There are from one to four or more anterior, and from four to six or more posterior ethmoid cells.

The sphenoid sinus becomes evident at about the third or fourth year, and attains full development about the sixth or seventh year. Its average size in the adult is about 18 mm. in the three dimensions; but these measurements may vary greatly, and as a general rule, the larger the sinus, the thinner its walls.

In the thin bony plate which separates the orbit from the antrum, forming the roof of the latter, is the canal or groove for the infraorbital vessels and nerve, the latter being one of the branches of the fifth or trigeminal nerve.

The inferior wall of the frontal sinus enters into the formation of the roof of the orbit, and the posterior wall is in relation with the dura mater and the frontal and olfactory lobes of the brain.

The ethmoid cells are separated from the orbit by the orbital plate of the ethmoid bone, and are in relation above with the olfactory bulb. The most posterior ethmoid cell is very intimately related above and externally with the internal carotid artery.

The sphenoid sinus is separated from the cranial cavity by a layer of bone from 2 to 4 mm. thick. On the upper surface of this bone in the middle line, are the optic commissure and the pituitary body. On each side of the middle line is the internal carotid artery and beside it the optic nerve, separated from the sinus by a very thin bony wall, while the great cavernous sinus is in close relationship with the external wall.

Braune and Clasen are credited with the statement that the average total capacity of the accessory sinuses on one side is 44.6 c. c., which is about 10 c. c. greater than that of both nasal cavities proper. That is to say, the fluid capacity of the accessory sinuses of one side is one ounce and a half. The area of the mucosa lining the nose and accessory sinuses, is about 144 sq. in. This great area of mucosa undoubtedly accounts for the very rapid secretion of pus which takes place in so many of these cases. This mucosa is of the columnar ciliated type, the cilia of which wave toward the ostia, and this keeps the healthy cavity swept clean of fluid, dust, bacteria, etc.

Each accessory sinus communicates with the nose by a minute opening called the ostium. That of the maxillary sinus is located near the summit of the cavity in the naso-antral wall, in a position totally unfit for drainage by gravity; it is often blocked by a hypertrophied middle turbinate, or one of natural size crowded against the ostium by a deflected septum. In many instances an accessory ostium or even several, may exist.

The ostium of the frontal sinus is located at its most dependent portion and empties into the infundibulum or gutter which carries the fluid downward and backward.

Each ethmoid cell has an ostium, in some cases well located for drainage by gravity, and in other cases located so near the top of the cell that gravity can play no part in the escape of fluid contents.

In the case of the sphenoid sinus, practically all of its cavity lies below the level of the ostium, which is high up in the anterior wall, in a position very poorly located for drainage.

The ostia of the accessory sinuses are so deeply situated in the recesses of the nasal cavities that slight turgescence of the nasal mucosa is sufficient to block these openings. Then the air contained in these sinuses becomes rarified by the absorption of its oxygen, and the negative pressure thus produced results in turgescence and passive congestion of the mucosa, the resistance of which is thus diminished. In this condition invasion of the cavity by pathogenic organisms is very prone to result in an empyema, inasmuch as the depressed cilia cannot make a clean sweep, nor expel through the ostium offending material that has been swept thus far. In addition to this method of infection, statistics show that numerous infections of the antrum come from diseased teeth, the roots of which frequently project through the alveolar process into or through the floor of the antrum.

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From all the foregoing it will be seen that the aceessory sinuses anatomically are constructed so as to invite inflammation. In a word, the integrity of the sinuses depends upon good ventilation and drainage.

Obstruction of the nose, anatomical or inflammatory, interferes with ventilation and drainage of the accessory sinuses. Under anatomical obstruction of the nose may be classed a deflected septum or hypertrophied turbinates. Under inflammatory obstructions may be mentioned cases of trauma, such as a broken nose, and cases of acute coryza. At this point I wish to lay special emphasis upon the frequency with which a sinus suppuration follows an attack of la grippe, for in a great many cases of sinusitis we find a history of a concurrent or preceding attack of this disease. When an anatomical obstruction of the nose is rendered still more complete by an inflammatory obstruction, how can the accessory sinuses escape participating in this inflammatory condition? As a matter of fact, they very frequently do not escape, although every case of sinus inflammation does not, by any means, go on to suppuration. Many cases undergo resolution before the stage of suppuration is reached, while many others pass from the acute to the chronic stage of inflammation without pus having actually formed. Thus, chronic ethmoiditis is one of the very common conditions for which we are consulted, and many of these cases can be relieved only by surgical drainage of the ethmoid cells, in order that the abundant serous or mucous secretion may have free exit. The retention of this secretion, under pressure, within the ethmoid cells, gives rise frequently to the symptom complex of hay fever, and almost as often to that of asthma; and many cases of hay fever and asthma can be cured and others greatly relieved by radical surgical drainage or extirpation of these cavities.

The very important anatomical relations mentioned above make it imperative that prophylactic measures, designed to prevent accessory sinus inflammation, be taken by the early removal of existing adenoids, which, if left in place, will ultimately be responsible for anatomical obstructions of the nasal passages proper. Furthermore, when such an anatomical obstruction does exist in a nose, it should be corrected as a prophylactic measure against sinus infection. These same anatomical relations of the sinuses make it absolutely essential that drainage be established when empyema of an accessory sinus exists.

Some of the complications possible from inefficient drainage may be enumerated as follows:

In the case of the antrum, empyema may result in a fistula, opening on the face or into the mouth, while in the case of the frontal sinus or ethmoid cells, evacuation of pus may occur through a fistula on the face or forehead. Diseases of the frontal or sphenoid sinus or ethmoid cells, may be responsible for ocular defects, septic meningitis, brain abscess, or cavernous sinus thrombosis.

Suppose a patient has an accessory sinus empyema. One or several of the following diagnositic conditions will be presented:

(1) Dull, intense, or intolerable localized pain in the cheek, root of the nose, forehead or cranium.

(2) Serous, mucopurulent, or purulent discharge from the anterior and posterior nares.

(3) Elevation of temperature and pulse rate.

(4) Increased leucocyte count, with high or low percentage of polymorphonuclears, depending upon the resistance of the patient.

(5) Septic chills and sweats.

(6) Asymmetrical findings on transillumination and skiagraphy.

(7) Ocular complications, such as neuritis, optic atrophy, exophthalmos, or ophthalmoplegia, partial or complete.

(8) Cerebral complications with eventual paralysis of the peripheral structures, the innervation centers of which are affected.

Some stress has been laid upon the use of stock and autogenous vaccines in the treatment of infection of the accessory sinuses, but those who have depended upon vaccines for a cure have been almost invariably disappointed. However, when used in conjunction with surgical drainage, reports would indicate that recovery is somewhat more prompt in some cases.

In rare instances it is possible to pass a slender eustachian catheter into the ostium of the affected sinus and by compressed air or irrigation, cause the expulsion of its contents, with amelioration of the symptoms and possibly a cure. In other rare instances suction may be effective. Suction may be applied in one of two ways: First, with the mouth closed and the nostrils blocked with the thumb and finger, the patient makes a violent and prolonged effort to inflate the lungs, thus producing a negative pressure in the nasal cavity, with a tendency for the pus to leave the accessory sinuses and flow into the nose.

Second, by the application of some form of suction apparatus to the nostrils, while the patient blocks off the throat with the soft palate by placing it in the position to utter the letter K, or by attempting to swallow saliva or water. However, these conservative measures fail, as a rule, and more radical procedures are necessary.

The easiest way to drain the antrum is by thrusting a trocar through the naso-antral wall, after which the contents may be expelled through a two-way catheter by irrigation or compressed air. The antral abscess frequent-

ly requires for a cure a much more radical opening in the naso-antral wall beneath the inferior turbinate, and sometimes, in addition, a radical enlargement of the ostium after the removal of the middle turbinate. Still other cases require, in addition to the opening of the naso-antral wall, an opening beneath the upper lip in the canine fossa.

It is frequently impossible to drain an accessory sinus abscess through the nose without first changing the position of the septum. The best method of accomplishing this is by means of a submucous resection of the cartilaginous and bony deformities of the septum. Furthermore, drainage of the frontal, ethmoid and sphenoid sinuses, almost invariably requires the partial or complete removal of the middle turbinate, in order that free access may be had to the structures concealed and covered by this body.

Every operator will agree that these operations in the attic of the nose are extremely exhausting and are made the more difficult by the fact that these sinuses lie deep in the nose, from 2 to 3½ inches from the nostril, and the operator is able to view the parts with but one eye, and is thus deprived of perspective, by which distance and depth are judged. The most precise knowledge of anatomy and relationships is essential, and every move must be made with the attention centered on two aims, namely, to avoid the important related structures, and to go deep enough to reach the most remote sinus involved.

Some possible complications during operation are:

(1) Perforation of the orbital plate of the ethmoid, thus exposing the patient to orbital abscess, or injury of orbital structures.

(2) Perforation of the cribriform plate of the ethmoid, thus exposing the patient to infection of the meninges.

(3) Perforation of the walls of the sphenoid sinus, with injury of the optic nerve or commissure, or wounding of the internal carotid artery or cavernous sinus, which would result in practically instantaneous death.

Empyema of the maxillary, frontal or ethmoid cavities, sometimes requires radical external drainage to effect a cure. As mentioned above, an antrum can be drained in the canine fossa, beneath the upper lip, thus leaving no visible scar. Drainage of the ethmoids or frontal sinus externally, leaves an unsightly scar at the root of the nose and in the eyebrow. Moreover, osteomyelitis quite frequently follows the external operation on the frontal sinus, due to infection of the cut edges of the bone during the operation, by the purulent contents of the sinus. This results, when localized, in an extensive loss of bone by the formation of sequestra, and adds further to the disfigurement. When the osteomyelitis becomes general by spreading extensively to the venous canals in the bone, the death of the patient is practically certain, by transmission of the infection to the brain through the venae perforantes. For these reasons, the internal or nasal route is the route of choice, if thereby good drainage can be established.

I have gone back in our records as far as July 1st, 1913, and find 58 histories of cases operated upon for accessory sinusitis. In these 58 cases we have drained 38 antra, 24 frontal sinuses, 22 sphenoid sinuses, and 44 ethmoid labyrinths. In no case was the frontal sinus alone or the sphenoid sinus alone, involved. In 17 cases the antrum alone was at fault. In 15 cases the ethmoids alone were diseased. The antrum and frontal sinus were involved in 2 cases, the antrum and ethmoids in 2, the frontal sinus and ethmoids in 2, and the ethmoids and sphenoid sinus in 3. The antrum, frontal sinus and ethmoids were involved in 3 cases, and the frontal sinus, ethmoids and sphenoid sinus in 7. All the accessory sinuses on one side were involved in 11 cases, and in 12 cases the infection involved both right and left sides.

Of 7 cases presenting marked hay-fever and asthmatic symptoms, 4 have been entirely relieved, and three very greatly improved.

Four cases, after operations which established partly efficient drainage, refused further surgical measures and passed from observation before the sinuses became free from pus, but with relief of those symptoms due to retention of pus under pressure.

In one case a great septal deflection was corrected by a submucous resection of the septum, after which extirpation of the right and left ethmoid cells was performed. A septal abscess followed, and fourteen days after the operation, spinal puncture showed streptococci in the spinal fluid, and death occurred three days later.

In three cases the antrum was filled with polyps and granulation tissue. Two were promptly cured after their removal, and the third, which was recently operated for multiple sinusitis of the left side, is much improved.

In a case operated upon April 30, 1915, the sphenoid sinus was entirely filled with polyps. It has been a very common experience to find several or all of the ethmoid cells filled with polyps and granulation tissue.

March 19, 1914, we performed a Killian operation on a frontal sinus abscess which had ruptured into the orbit. Localized osteomyelitis developed, with the death of several small portions of bone, causing a discharging sinus to persist for some time. I reported this situation to this Section at the last state meeting,

and am now glad to be able to state that after removing these sequestra, the wound healed promptly, and the patient was discharged in good condition on June 20, 1914.

As stated, of the 58 cases operated by us since July 1, 1913, death claimed 1 case, 4 discontinued treatment after relief of pain, 2 recent cases are still under treatment and 51 cases were discharged, after varying periods of time, as cured. What the result would have been in the absence of surgieal drainage can only be conjectured. Many would doubtless have developed polypoid degeneration of the nasal mucosa, or the disgusting and ultimately incurable condition of atrophic rhinitis; a very small per cent would doubtless have been relieved by spontaneous resolution; others would have been relieved from their suffering by fatal results, while still others would have suffered a worse fate by becoming victims of some drug habit in their effort to secure relief from pain, without an operation.

ABSTRACT OF DISCUSSION.

Dr. Joseph Beck, Chicago, said: Dr. Schenck has presented a very complete paper. I have no criticism to offer. However, I expected the essayist to say something of the pathology of non-suppurating cases. Many practitioners make diagnosis of sinusitis only after pus is observed. There are probably ten non-suppurating cases to one suppurating. Examination of the nose shows no trouble because the infection is hidden in the ethmoid. I am of the opinion that sinus troubles are not all inflammatory, but a great many are degenerative. Sneezing, hydrorrhea and asthma, are prominent symptoms of the non-suppurative cases. If such cases are operated upon early it will obviate the establishing of eye symptoms and asthma. I have not done the Killian operation in two years. Will avoid this operation in the future, if possible, on account of the danger of deformity following it.

Dr. W. R. Thompson, Fort Worth, said: I would emphasize the importance of seeing these cases early, that relief may be given before granulation tissue is formed. I find it quite difficult to relieve some of these cases, and the patients may suspect that some experimenting is being done when you are compelled to go from one sinus to another. A few years ago I was enthusiastic over the external operation, but am now more in favor of the inside operation, as described in the paper just read. I was impressed with Dr. Beck's reference to non-suppurating cases. I have had a number of such cases. I believe Dr. Schenck is working along the proper line. I have recently operated upon a case of antrum trouble, through the nose, with only partial relief. It is evident that other sinuses are involved in this case. It is very trying on these patients to have to submit to so much operative procedure, but operative treatment is their only hope for relief.

Dr. J. M. Woodson, Temple, said: I have been watching Dr. Schenck's cases. Two only had symptoms of headache. Patients were relieved of this symptom by sprays of adrenalin and novocain. One case showed a tendency to atrophic changes. In this case only the middle cells were removed; the turbinates remained. I consider sinusitis one of the most frequent causes of headache. Many patients make the mistake of going to strangers who have not watched the case. I recall one patient who suffered greatly with headache, and who had been refracted many times and had many sets of glasses, but was not relieved until the sinuses were operated upon.

A CASE OF DOUBLE CHRONIC MAXILLARY SINUSITIS COMPLICATED WITH UNILATERAL ETHMOIDITIS.*

BY

E. M. SYKES, M. D.,

SAN ANTONIO, TEXAS.

This case is presented not because it is considered rare but because it demonstrates some of the reasons why failures occur in the treatment of chronic maxillary infections. As it has been quite an object lesson to me, I felt that its description was justified in order to point out some of the ordinary complications which evidently still escape our attention.

Mrs. J., American, age 47, in September, 1913, had the stump of the first upper right molar tooth pulled. Four days afterwards the socket of the extracted tooth began to discharge pus, with which was associated fever and severe pain in the right cheek. The condition was diagnosed by a specialist in her home town as acute antrum suppuration on the right side. She returned to the dentist, however, who extracted the second molar on the same side and succeeded in reaching the antrum, which he treated by lavage, washing out quantities of yellowish-white foetid pus. In six weeks she was discharged and went home, only to have a return of the pus and pain. Nevertheless, she treated herself for a month, when the left side of her face became excruciatingly painful. The pain grew in intensity but was finally relieved at the end of twenty-four hours, by a sudden discharge of bloody, stinking material which poured from her nose and flowed into her throat. Again she sought relief from her dentist who, in his endeavor to find the seat of the trouble, removed all the molars and bridge work from the left upper mandible, but without any diagnostic or curative effect. She then visited the local rhinologist, who treated the left antrum by puncture and lavage, for several weeks. Refusing to have a radical operation done, as was suggested by the specialist, she journeyed to San Antonio. In April, 1914, a competent specialist there did an infraturbinal resection of the naso-antral wall on both sides, in order to establish drainage into the nose. Irrigations and packings with iodoform gauze through the holes in the alveolar process, were performed daily. As this treatment was not entirely successful, the naso-antral walls were again resected the following July and a mixed vaccine administered. No marked improvement followed and the patient was referred to a dentist, who widened the alveolar holes extensively and treated the antri by daily lavage. The pus and pain decreased in amount and intensity but never entirely ceased.

In October, 1914, the patient consulted me, and an examination showed, in addition to the antritis and the holes in the alveolar process, a septum deviated to the left in the upper anterior portion

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and adherent to the middle turbinate. The left inferior turbinate was enlarged and adherent to the septum in its middle third. The left middle nasal passage and the naso-pharynx, were filled with thick, yellow pus and crusts. She complained of pain in both cheeks and sharp radiating pains in the left orbit. Accordingly, a diagnosis of chronic maxillary sinusitis and a left-sided ethmoiditis was made, after the probability of a frontal sinus and a sphenoidal sinus infection were excluded by examination, transillumination and an *x*-ray picture.

Seeing how obstinate the condition was, in spite of good drainage, a radical operation was immediately proposed as the best possible treatment. The patient was sent to the hospital and an operation midway between a Caldwell-Luc and a Denker, was done, in that the anterior wall of the antrum was taken away up to the pyriform orifice. By so doing it was possible to examine and curette the whole antral surface, including the anterior superior angle, which, in the ordinary Caldwell-Luc opening, is hard to inspect and reach. A considerable amount of very vascular granulation tissue was found and curetted out of both antra, being especially abundant in the corners. An opening was made in the naso-antral wall, under the inferior turbinate, and a flap of nasal mucosa was thrown outwards onto the floor of the antrum. The left naso-antral wall was rather brittle from former operations, and it was impossible to make an opening with clean-cut edges. Consequently, in healing, it narrowed considerably. The antrum was packed lightly with iodoform gauze. The muco-periostrial flaps were stitched with silkworm gut, while the openings in the alveolar process were closed by flaps of buccal mucosa. The iodoform gauze was removed in forty-eight hours and nothing was done during the first week, except to keep the nose clean. Eight days after the operation, irrigations with normal salt solution were begun. The flaps covering the alveolar openings did not hold, so these openings were used to inspect and treat the antral cavities. In order to reduce suppuration and to stimulate growth of normal mucosa, a spray containing tincture of iodin, balsam of Peru and castor oil, equal parts, was used daily for one week, with satisfactory results. Irrigations with alcohol, beginning with 30 per cent strength and increasing gradually to 85 per cent were done every other day, the holes in the alveolar processes being plugged with cotton and collodion. In the course of two months suppuration had ceased on the right side and the alveolar opening on this side closed by granulation tissue. Unfortunately, no such good result developed on the left side; instead, yellow pus continued to form in the antrum and flow from the nose into the naso-pharynx. In addition, the patient suffered from pressure pains between the eyes and sharp radiating pains in the left orbit, while the infra-orbital nerve was very sensitive to the touch. The alveolar hole, at this time, proved to be of some assistance in making an exact diagnosis. By careful inspection, pus could be seen flowing down the inner surface of the naso-antral wall from the region of the natural hyatus, while a probe passed into this hyatus by way of the antrum, could be seen on nasal examination to be pushing against the thin inner wall of a pus sac formed by broken down anterior ethmoidal cells. Cultures and smears on repeated occasions showed the presence of a pure Staphylococcus aureus. It was easy to see that the left antrum was acting as a reservoir for pus created by the anterior ethmoidal cells, a condition recognized and called by Killian, *sinusitis sinuetide.*

A Mosher operation was done on the left anterior group of ethmoidal sells, following which an autogenous vaccine of the Staphylococcus aureus was administered weekly, the dose ranging from one hundred million to five hundred million. Six doses in all were given. At the end of two more months, suppuration in the ethmoidal cells ceased entirely, but antral washings still contained strands of muco-pus. Applications of silver nitrate, 4 per cent, to the antral mucosa, soon improved this condition. Arrangements were being made to close the opening in the alveolar process when severe pneumococcal infection of the nose set in, following a careless exposure to bad weather and crowded theatres. In the course of several weeks, she recovered completely and an attempt was made to close the remaining opening through the alveolar process, by a plastic operation, which was only partially successful. After this rather stubborn hole has been closed, the patient will be discharged, for suppuration and pain has ceased on both sides.

The conclusions to be drawn from this case are:

(1) Openings into the antrum communicating with the mouth are apt to retard healing, because of reinfections from buccal bacteria, which are always present in great numbers.

(2) An opening into the nose through the naso-antral wall, affords the most natural and efficacious way for pus to drain from an infected maxillary antrum. There is less danger of secondary infection and hence a spontaneous cure is more apt to result.

(3) A radical operation is indicated where proper intra-nasal drainage has failed to bring about a cure. It gives a better opportunity than any nasal operation to inspect and curette every nook and corner of the antrum.

(4) In persistent cases of antral discharge, always look for ethmoidal and frontal sinus suppurations as possible sources of reinfection.

(5) Vaccines are of value in sinus suppurations, when good drainage has been established.

(6) Dentists and rhinologists should cooperate in their maxillary antrum cases, in order that proper diagnoses may be made and the patient saved the unnecessary extraction of sound and much needed teeth.

SOME INVESTIGATIONS CONCERNING THE MYSTERIOUS FORM AND FUNCTIONS OF THE INTERNAL AND MIDDLE EAR.*

BY

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WACO, TEXAS.

This subject has engaged the profound attention of many eminent scientists, and yet there remains much that is obscure. The labyrinth was well named by the Greek anato-

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mists, because of its mysterious form. The mechanism has engaged the attention of such scientists as Helmholtz and Tyndall, and I fear that because of their eminence their conclusions have been too readily accepted by physicians as final. The scientist is rarely a profound student of anatomy and physiology, and the same may be said of the physician with reference to physics. Politzer is perhaps the most eminent otologist of modern times and yet I have been surprised at the crudeness of some of the experiments that he reports on the mechanism of the middle ear. The pathologist is rarely a profound student of the natural sciences, because of the magnitude of his own special calling.

There is perhaps no organ in the body that is so complex and mysterious in its form and functions as the labyrinth. To understand and appreciate the wonderful mechanism and functions of this organ the student should be well versed in the natural sciences, particularly in zoology, including the evolution of animal life and comparative anatomy. He should be thoroughly familiar with the science of physics, and an otologist of experience. When we appreciate the broad scholarship required to become a scientifie investigator of this subject, we can well understand how the scienee of otology is enveloped in so much theory.

The ear is a compound sense organ. It is not only the sense organ of hearing, which ranks next in importance to that of sight, but it is intimately associated with the sense of equilibration, which ranks with sight and hearing, and outranking in importance the special senses of taste, touch and smell. It is fully entitled to rank as a sixth sense. I suspect this sense is intimately associated, as all the other special senses are, with still another special sense, that of co-ordination. The special senses are wonderfully confederated or associated together and presided over by the mind for the protection, comfort and pleasure of the body.

For many years I accepted the theories relating to the reception and transmission of sound to the internal ear, as indisputable facts; but some eighteen years ago, I observed some phenomena, while treating the ear, that led me to doubt some of them. I became an investigator from that time. I have written numerous papers and conducted clinics in Europe and in this country, to prove my contention that sound is transmitted not through the membrana tympani, ossicles and the fenestra ovalis to the cochlea, but through the air of the tympanum to the cochlea through the membrana tympani secundaria of the fenestra rotunda. I took this view for the following reasons:

I observed numerous cases where the ossicles and drums were destroyed wholly or partially and fairly good hearing remained. I also discovered that in some cases where the drums and ossicles were absent the hearing could be greatly improved by the use of cotton or some other body, to cut off the antrum and opening of the eustachian tube from the posterior part of the ear, where the fenestra rotunda is located. I was able to demonstrate how the so-called artificial membrana tympani sometimes improves the hearing.

In 1898, I visited London and made numerous demonstrations at the Golden Square Hospital. I was indebted to the members of the staff, particularly to Dr. Lambert Lack, for many courtesies. On my return to the United States, I made numerous demonstrations at the Illinois Eye and Ear Hospital in Chicago. I have received numerous letters from otologists who have investigated my theories and who corroborated them. I made investigations as to the best method of concentrating the sounds upon the fenestra rotunda. I had some rubber tubes made but they were not very successful. The best I have been able to devise is made from the ordinary gelatine capsule. I have an assortment of sizes to fit the individual ears. I cut a large hole in one side of the closed end for the purpose of allowing the sound waves to pass directly to the rotunda. This opening is directed backward in the canal. In most ears the canal, that is, the bony part, bends backward so that when the tube is placed the posterior part of the outer rim projects into the canal. In this case the tube should be cut off posteriorly at the outer rim. Any foreign body placed in the outer ear is usually irritating; this I found to be the case particularly with rubber, which led me to the use of the gelatine capsules. In order to make the capsules durable and non-irritating I coat them with a preparation called "new skin," collodion, like rubber, being irritating.

I flatter myself that I was somewhat instrumental in explaining the occasional benefits derived from the so-called membrana tympani, as the later writers rarely refer to them.

The old theory of the transmission of sound, as taught by Helmholtz, Tyndall and others, is still maintained, though the assumption that the semicircular canal is the seat of equilibration is generally aecepted. I presume that Ballinger represents the concensus of opinion of otologists generally. For this reason I will quote his latest description of the method of transmission of sound to the internal ear.

"The sound waves conducted from the air impinge upon the membrana tympani, producing vibrations in it. These vibrations conducted along the chain of ossicles, transmit impulses to the labyrinthine fluid through the medium of the footplate of the stapes. The impulses originating in the vestibule pass directly into the scala vestibuli and through the membrane of Reisner to the endolymph, where

sympathetic vibrations are imparted to the several parts of the membrana tectoria, depending on the pitch of the tone. The vibrations in turn stimulate the hairs of the hair cells which normally project into its under surface."

He admits that in the cochlea is located the perceptive endings of the auditory nerve. In another paragraph he says:

"The function of the membrana tympani is to receive and convey the sound waves to the chain of ossicles, and thence to the labyrinth. That it is not absolutely essential to fair hearing is shown by the fact that good hearing is often present when the membrane is perforated or entirely absent. The ear drums also protect the tympanic mucous membrane from the deleterious effects of the air and from the entrance of morbific germs and foreign bodies."

Please note that Ballinger does not mention the fenestra rotunda as taking any part whatever in the transmission of sound. However, in another paragraph, he says:

"The round window opens into the cochlea, and the membrane closing it forms an elastic valve to relieve the shock to the cochlea in the presence of excessive sound waves."

My theory of the transmission of sound to the internal ear is as follows:

I believe that the transmission of sound to the internal ear is made wholly through the fenestra rotunda, and not through the fenestra ovalis. I believe that in the cochlea, exclusively, is located the perceptive endings of the auditory nerve; that in the semicircular canals is located exclusively the terminal endings of the nerve of equilibration, and that the two senses are as separate and distinct as those of taste and smell. While the nerves to the semicircular canals and the nerve to the cochlea, as well as the facial nerve, all leave the brain through the internal auditory canal, they are as separate and distinct as those nerves which pass out together through any other foramen of the skull. Because they occupy the same bony cavity is no reason why their functions should be confused, as they have been for this very reason.

I believe that the drum serves two purposes, first, it separates the tympanum with its delicate mucous membrane from the drying effects of the external air, dust and infective germs; second, it serves as a resonator to the tympanum, much as membranes give resonance to the drum and the banjo. The function of the chain of ossicles with their muscles is to regulate the tension of the drum.

A moist condition of the tympanum appears to be absolutely essential to good hearing. I have observed that where the hearing remains fairly good after the destruction of the drum and ossicles, the tympanic cavity remains moist, and the reverse is true of those ears where the tympanum becomes dry. I attribute this to the fact that the membrana tympani secundaria over the round window evidently loses its resiliency.

The fact that three nerves, auditory, equilibration and facial, all have an outlet through the internal auditory canal; that the parts of the labyrinth are so intimately connected in one bony cavity; that the terminal endings in the membranous labyrinth are surrounded by one continuous body of perilymph fluid, and that even the membranous labyrinth containing the endolymph is slightly connected, has doubtless been the cause of much mystification concerning the mechanism and the functions of the ear.

The only way to clear up this confusion is to trace the evolution of the ear from the lowest to the highest form of animal life. So far as we can discern, the protozoa or simple cell, has no acoustic organ. Certain forms of radiata appear to have rudimentary acoustic nerves. Many forms of gastropoda have their organs of hearing located in their organs of locomotion. The cephalopoda have their organs of hearing located in the head, the same as vertebrates. Worms have acoustic vesicles, located in the head and connected with the oesophageal nerve ring. Insects, such as grasshoppers and locusts, have their acoustic organs located on the side of the first abdominal segment or the base of the first segment of the anterior legs. Other insects have their organs of hearing located in their antennae or feelers. Lobsters and other large crustacea, have their organs of hearing located in the basal joints of the first pair of antennae.

Nearly all vertebrate animals have distinct organs of hearing, though they differ much in form. Fishes have no external nor middle ear, and no cochlea. It is important that we note this fact particularly. In fishes the semicircular canals are highly developed, while the acoustic nervous system is distinct and the receptive terminal endings of the acoustic nerves are located in little bulbs beneath the skin of the head or body, where the sound impulses from the water are received. We perceive that in fishes the acoustic and equilibration organs are apparently distinct, the latter possibly being more highly developed. I dare say that this is likely the case in all the lower forms of life, but for the reason that the organ of hearing alone has been differentiated and studied because of its greater importance. Reptiles, except the crocodile, are without external ears. In some reptiles the membrana tympani is located externally, appearing as a thin scale in connection with the skin. In reptiles and fowls the membrana tympani is supported by one single bone or chain of bones, and the membrane is in convex form. In both reptiles and fowls the incus

and malleus are external to the ear, and appear as quadrate and jugal bones supporting the jaws. Thus we find that the organ of hearing in all forms of animal life, until we come to that of mammals, is more or less distinct from that of equilibration. We know that in the case of fowls the acoustic sense is very acute. Any one who has ever hunted the wild turkey knows this, and yet the turkey has but one straight bone supporting the drum, much in the same manner that the handle of an umbrella supports the fabric.

In man and all the mammals, we find the external ear, the auricle and the bony labyrinth including the cochlea. In mammals we do not find the drum supported by one straight bone in convex form; on the contrary, the chain of bones act not as a support but as a lever, to pull the drum into concave form.

To me, the theory that the sound waves are transmitted through the ossicles is very unscientific. I can scarcely conceive of a poorer conductor of sound than the chain of ossicles, with their articulations and muscles. The fenestra rotunda is located directly over the base of the cochlea, where the sound wave would pass directly to the membranous part of the cochlea containing the organ of Corti. The membranous labyrinth, which contains the terminal endings of the nerves of equilibration and of audition, is only indirectly connected together by the small and crooked ductus reuniens.

Why were these two senses located together in the same bony cavity, surrounded by the same perilymph that surrounds the membranous labyrinth, containing the same endolymph in which is located the nerve endings of the two senses? I will answer the question in this way. Nature never makes two cavities and two fluids separately, where one would serve the purpose. Nature is economical where economy will equally serve her purpose.

As I have already stated my conclusions, I will not recapitulate. I have taken issue with accepted theories after mueh study. I believe that the consideration of the problems which are at issue in this paper are worthy of the thought of the profession, to the extent that the mysterious form and functions of the middle and internal ear may be completely solved.

ABSTRACT OF DISCUSSION.

Dr. J. W. Head, Fort Worth, said: Our usual routine is to examine the drum and ossicles. Just why one can hear when the drum is gone or retracted against the handle of the malleus, is a point that I fail to comprehend.

Dr. M. P. Shuster, El Paso, said: The paper is profoundly scientific, but I think the theory that the round window and not the oval window is of first importance in the function of hearing, is questionable.

Dr. Cole, in closing, said: I think a thickening of the membrana tympani, or an atrophic membrane, interferes with hearing. I made the discovery in 1897 that a small pledgit of cotton placed in the anterior part of the tympanic cavity increased the hearing of the patient. I have also noticed that moist ears with a destroyed drum head, hear much better than dry ears.

EXCESSIVE BLEEDING AT THE MENSTRUAL PERIOD.*

BY

F. R. WINN, M. D.,

ALVIN, TEXAS.

I have used this title for my paper in preference to menorrhagia, for the reason that it more nearly describes that class of cases about which I wish to speak. If we consider the etiologic factors of excessive bleeding from the uterus it will at once be seen that that condition cannot properly be described as a clinical entity, but must be considered as a symptom of some organic or functional disturbance of the reproductive organs or their auxiliaries. By their auxiliaries I mean certain of the ductless glands, certain sympathetic nerve ganglia with their associated cerebro-spinal connections, and certain sections of the circulatory apparatus. The causes of excessive bleeding at the menstrual period might be divided into two classes: First, those showing some gross pathological lesion in the uterus or adnexa, such as malposition of the uterus, polypi of the cervix, fibromata of the uterus or adnexa, malignant disease of the uterus, pelvic inflammation, infective endometritis and ovarian and broad ligament tumors; second, those showing no gross pathologic changes in the uterus at all, or with changes confined to the endometrium, such as simple hypertrophic endometritis, subinvolution, atrophic endometritis, pelvic congestion, chlorosis, hemophilia and the great number of cases for which we can discover no assignable cause, but which empiric therapeutics have convinced me are due to functional disturbances of some of the auxiliaries mentioned above.

Cases coming under the first heading are separate clinical disturbances, of which excessive bleeding at the menstrual period is only a symptom, though it may be the predominating one and the one which brings the patient to the physician. Certain it is that, in this class of cases, when the pathologic condition is corrected, the bleeding takes care of itself.

The second class might properly be considered as clinical entities. Since the bleeding is the thing that brings the patient to the

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physician, and to stop the bleeding is the desideratum, both of the patient and the physician, and when the bleeding is stopped and the menstrual function returns to normal, we congratulate ourselves on having effected a cure. I hope that I have made clear this distinction without seeming to resort to hair-splitting. I am fully aware that such argument carried to its logical conclusion would lead us into a maze of mystification, as to what is a disease and what is a symptom.

Excessive bleeding at the menstrual period, of this class, represents neither a disease nor a pathologic condition. It is a condition the etiologic basis of which is so varied and of which the pathologic ground work differs so widely, yet producing constantly the same clinical manifestation, that I am tempted to class it here, if not scientifically at least clinically, as a disease *per se*. It is only with this class of cases that I will concern myself in this paper.

The first I am going to give to the surgeon without dispute, but those with which this paper has to deal I am going to contend properly belong to the medicine man.

Those cases showing subinvolution or hypertrophic endometritis, are frequently amenable to treatment directed to the uterus alone, but the greatest number of cases coming to the physician show no pathologic change in the uterus itself, and will resist any treatment directed to that organ alone. These cases depend so entirely upon a correct determination of the etiologic factors for their successful treatment, that I will devote more space to the etiology than might otherwise be indicated.

Doctor Hugo Ehrenfest, who has done much valuable work on this subject, very aptly says:

"The fact that the puerperal state, abortion and polypi undoubtedly form the most common cause of pathologic uterine hemorrhage, is probably responsible for the erroneous conception, almost as common among physicians as the laity, that every menorrhagia or metrorhagia is the direct result of some primary lesion in the uterus, or more specifically, in the endometrium. This erroneous conception is responsible for the all too general tendency to direct therapeutic effort toward the uterus in dealing with conditions of this sort. The unavoidable failure of such local therapy, and lately the very careful histological study of the uterus and endometrium in its normal and pathologic condition, have convincingly proved that in many instances other and more remote causes must be looked for to explain the most obstinate, severe and even fatal types of uterine hemorrhage."

I will here enumerate some of the more common of these remote causes, which I have referred to elsewhere in this paper as disturbances of the auxiliaries of the reproductive organs. We have all become convinced that certain abnormal vasomotor conditions resulting from impulses transmitted to the uterus from a normal or diseased central nervous system, are responsible for some forms of uterine hemorrhage. Henkel, in his enumeration of the causes of menorrhagia, lays special stress on chlorosis and we are all familiar with a great variety of menstrual disturbances that accompany this condition in young girls. I think no less common causes in those cases between puberty and 20 years old, are chronic constipation, struma, mitral stenosis, hemophelia, and neuro-arthritics. Latent tuberculosis and hereditary syphilis undoubtedly play an important part in this condition. The theory advanced by such men as Schieckle, Sturmdorf, Cristae and Denk, that during menstruation the coagulability of the blood is changed is disproven by Keller and Hoefnagel. Keller, using Buerker's method, ascertained that the blood of women coagulated in 4.65 minutes, and that this time of coagulability was not influenced by menstruation. The fact that normal menstrual blood is not coagulable perhaps led to this error. The explanation formerly given for this phenomenon, namely, that it was due to the admixture of a large amount of uterine mucus, cannot be maintained any longer. The mixture of uterine mucus with blood not menstrual, does not alter the coagulability of the same nor, indeed, does the whole product of a normal menstrual period influence the coagulability of blood drawn from the same patient, even though it be cervical blood from the same uterus.

To this fact I will refer later, but I wish here to express my surprise that all the textbooks to which I have access and which make mention of the non-coagulability of the menstrual blood, give the older view as the cause.

Bell, in 1912, had the opportunity to study the retained menstrual blood of 12 cases of hematocolpos and established two important facts, first, that menstrual blood does not coagulate on account of the absence of fibrin ferment and fibrinogen, and not on account of the admixture of mucus or lactic acid, and second, that the calcium excretion in the menstrual discharge is very large. Frankel and Boehm have definitely established the significance of hemophelia in uterine hemorrhage. In hemophelia the uterus during menstruation does not seem as markedly affected as the size of the bleeding area would lead us to expect. In only about one-third of the 151 cases collected by them, was the menstrual period abnormal, and in these amenorrhoea was as common as menorrhagia, though in a large number of cases the flow was abnormally prolonged. There are 10 cases recorded of fatal menorrhagia in hemophelia, and others nearly fatal. While discussing the coagulability of the menstrual blood we might mention the theory of Schickle and Klein, who assume that

the ovaries produce definite substances which reduce blood pressure, affect the endometrium, and just before menstruation appear in the uterine cavity; and that with a cessation of the production of these substances in the ovaries the menopause sets in.

Their claim that these substances are transported to the endometrium through the circulation, is plainly disproven by Sturmdorf, who found that blood flowing from an experimental puncture of the cervix, external to the endometrial zone, coagulated freely, while the simultaneously discharged menstrual blood failed to coagulate. This local loss of coagulability can be explained in two ways: First, by attributing a dialytic function to the endometrium, by which the essential factor in coagulation is filtered from the blood, and second, by assuming that the endometrium itself produces the inhibiting substance. The first explanation seems contradicted by the work of Bell, quoted above, and leaves us the theory of endometrial inhibition, largely influenced by the biochemical relation existing between the endometrium and the ovaries.

Thus we are led by easy stages to that extremely fascinating study, the ductless glands. That in a disturbance of the interrelation of these glands, namely, the pituitary, adrenals, mammae, thyroid and ovaries, lies the explanation of a large portion of these causes, I am fully convinced. And that this interrelation is of as much importance, or more, than a defect of some one of these bodies, also seems certain. Until the physiologist and the chemist can give us more accurate knowledge of the function of these glands and the influence each has on the other, our knowledge must come largely through empiric therapeutics. I will attempt to show later, by a report of cases, some apparently paradoxical results obtained by organo-therapy. Before I leave the etiology of this condition, however, I wish to direct attention to one point that, to my knowledge, no one has mentioned. That is, the prophylaxis possible in these cases, by the family physician recognizing in little girls before puberty candidates for this distressing symptom, and by proper hygienic and therapeutic measures to so develop the child as to bring her safely through puberty. I believe it quite possible to look through a schoolroom full of ten and eleven year old girls and point out the candidates for abnormal menstruation. Certainly we can recognize the evidences of infantilism, and in that group will be found most of these sufferers. I have now under my care two girls who are just approaching puberty, and I am highly pleased with the results so far of organotherapy in their cases.

For the treatment at the time of bleeding, the usual routine of ergot, hot water, styptics, tampon of vagina, ice bags with rest in bed; for the obstinate and dangerous cases, serum from fresh normal blood or gelatine injections, are perhaps our best local remedies, though if the hemorrhage is alarming perhaps uterine packing offers the safest and quickest means at our disposal for stopping the blood, but it involves the risk of infection, for the reason that the operation must usually be done at the bedside and time and opportunity for aseptic precautions are lacking. The method of Polson would seem perfectly safe. He places an elastic clamp over the cervix in such a way as to completely occlude the os. I have had no practical experience with this device, but it appeals to me. For those cases in which the bleeding is not great but unusually prolonged, I have found the solution of commercial formaldehyde, diluted 1 to 3, with water, to always stop the bleeding.

The greatest effort should be directed to determining the cause, and when that seems impossible one should try the empiric use of glandular extracts. Don't send these cases to the surgeon; don't curette them until all other measures have failed; don't, unless you know the endometrium is at fault, direct your therapy to the uterus itself. For myself, I use the very least possible amount of local treatment. I use a shot gun prescription of dessicated ductless glands, consisting of pituitary bodies, thyroid, mammary glands and ovaries; and even if convinced that only one of these glands were at fault, I would yet use the shot gun prescription. When you see two cases of hypothyroidism, one with amenorrhoea and the other with menorrhagia, you doubt the thyroid playing any part in the menstrual disturbance, but when you see both get well from the administration of thyroid glands, you at least take notice. Another remedy that has served me well is iron, and lately I use only the tincture of the chloride of iron. I don't say that it is the best preparation of iron, but only that I like it best.

I can better get you to understand my treatment by reporting here three cases, which very nearly cover the field.

Case 1.—Mrs. E., age 35, married, mother of three children. Family history negative. Menstruated at 14; flowed profusely, lasting from 4 to 6 days. She is what would be called in some places, a dirt eater: no energy and is known as a chronic invalid. Had been operated one year before I saw her, for appendicitis, but the surgeon told her he found a normal appendix. I first saw her in March, 1911. She was then flowing profusely. I thought she was aborting and wanted to clean out the uterus, but she was positive that she was not pregnant. Examination revealed a lacerated cervix, damaged pelvic floor, and the uterus small but flabby. I prescribed ice bag, rest in bed and ergot. I was called away to the country, and on my return another physician told me he had been called in in my absence, on account of the profuse bleeding, and

that he had tamponed the vagina and told her to continue the ergot and ice. In about an hour I was called again. I found blood flowing freely in spite of a fairly good tampon. I was now so sure of an abortion that I prepared to clean out the uterus. On removing the tampon the bleeding was so profuse that I was greatly alarmed, as the patient seemed almost exsanguinated and had had repeated fainting spells. I at once packed the uterus with gauze, and that very effectually controlled the bleeding. I allowed the packing to remain 48 hours and did not have to replace it. I felt sure I had saved her life, and my surprise may be imagined when she told me she bled like that at every menstrual period. I advised a hysterectomy and referred her to the surgeon, who repaired the pelvic floor, the lacerated cervix and curetted her, and assured me that would be all she would need. She stayed in the hospital four weeks, and three weeks after returning home had another hemorrhage like the one described above. I again advised hysterectomy. She would not again submit to an operation, and continued to bleed, in spite of treatment, until March, 1914, when I put her on a prescription of dried pituitary, 5 grains; thyroid gland, 2 grains, and ovary, 5 grains. To the delight of all concerned, her menstruation became normal in quantity and duration, and remained so until I lost track of her.

Case 2.—Mrs. H., age 38, married, mother of three children; used to vigorous outdoor life; well nourished and very strong. Family history negative. Consulted me in 1913, for excessive and prolonged bleeding at the menstrual period. Commenced to menstruate at 14; was normal until after the last child was born, and had put on some fat since then. I diagnosed the case chronic endometritis and curetted. The menses ceased for five months, and she gained 32 pounds. She thought she was pregnant, but began to flow again as before. I put her on organo-therapy in every combination imaginable, without result. I then began local treatment, swabbed the vagina well with pyroligneous acid, injected 15 minims of pure carbolic acid into the uterus with applicator syringe, carrying a strip of gauze, and packed the vagina with ichthyol and glycerine. This treatment, repeated three times a week, affected a permanent cure.

Case 3.—Mrs. W., age 39, mother of five children, with five abortions; all abortions since the last child. She consulted me for intense periodic pains in the right iliac fossa. My diagnosis was chronic appendicitis. I referred her to a surgeon. Operation revealed a normal appendix, left ovary atrophic and right ovary cystic. The left ovary was in a mass of adhesions and was removed. Cysts in the right ovary were punctured, the lacerated cervix repaired and the uterus curetted. Six months later she came to me again complaining of amenorrhoea. I put her on pituitary, 5 grains; thyroid, 2 grains, and ovary, 5 grains. Menstruation returned in 10 days. I saw no more of her until this year, when she came to me complaining of excessive and prolonged bleeding at the menstrual period, which was very irregular. I put her on the same treatment and her menses are again normal.

To sum up, then, I would suggest the necessity of looking for remote causes for this condition. I would strongly urge the discontinuance of curettage for every bleeding woman, a therapeutic measure so unreliable that one cannot understand why it could have become so prevalent. In the treatment I would not take away a single therapeutic measure which experience has proven satisfactory, but would call attention to the splendid results obtained by the use of organo-therapy. I would emphasise the benefits of a mixed treatment over that of a single gland. In support of this idea, I would call attention to the anomaly of thyroid deficiency causing amenorrhoea in one case and menorrhagia or metorrhagia, in another; to cases of goiter accompanied some by amenorrhoea and some by menorrhagia, or the case reported above, of the removal of the ovary causing at one time amenorrhoea and at another time, in the same patient, menorrhagia.

I have sought to explain this to my own satisfaction by assuming that these glands require for their proper functioning a synchronous action, and that a defect in one or more of these bodies causes disturbance in proportion as it puts out of tune the action of the whole group.

I would lay special stress upon the possibility of recognizing in children the evidences of infantilism and by proper care correcting the defects before puberty.

ABSTRACT OF DISCUSSION.

Dr. C. R. Johnson, Gainesville, said: Dr. Winn's paper is full of good thought and appeals to me first, because he decries the promiscuous use of the curett; second, because he presents what he terms his "shot-gun" prescription, and third, because the paper calls attention to the fact that we must look more to the glandular system for the explanation of this derangement.

Dr. W. Wilson, Memphis, said: The idea of Dr. Winn, that probably the so-called ductless glands have control over this condition, should lead us to investigate the possibility of a focal infection in some part of the body, as a necrotic tonsil, pyorrhoea alveolaris, etc., being the factor that has thrown the governors (ductless glands), out of balance; and the correction of this focal infection may restore balance necessary to effect a cure.

PLACENTA PRAEVIA: REPORT OF CASE.*

BY

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I shall take but a very few minutes of time outlining a subject, which is of vast interest to the general practitioner as well as the obstetrician and gynecologist, who of late have been writing so much on the surgical treatment of such cases. In my opinion, it is the most serious surgical case the accoucheur ever meets, and it tests his knowledge as no other complication of pregnancy. The prognosis depends upon his ability for quick reasoning, keen judgment and immediate action.

*Read before the Section on Gynecology and Obstetrics, State Medical Association of Texas, Fort Worth, May 6, 1915.

It will not be necessary to discuss the normal development of the placenta, and I will not attempt to tell why or how this abnormal implantation occurs. I will dwell, rather, on the diagnosis and practical treatment of this complication of pregnancy. The diagnosis is usually not made until we are called to see the patient, on account of an antipartum hemorrhage, which is always alarming to every one concerned.

Edgar says: "Early in pregnancy the diagnosis is impossible unless the placenta is palpated." Some authors claim that there is a soft, patulous feeling of the cervical canal, but because of the few cases the general practitioner examines, this would be very uncertain. There is nothing gained by abdominal inspection, palpation and auscultation. The character of the hemorrhage and the actual palpation of the placenta, are the only positive signs of placenta praevia.

As a rule, this condition is found in the multigravidae. The os is more patulous and offers but little resistance to the finger when introduced into the cervix. In partial placenta praevia, one will be able to palpate the bag of waters and the head on one side and the placenta on the other, while in placenta centralis one will be able only to palpate the placenta.

For partial or lateral placenta praevia, my method of treatment, after the first sign of hemorrhage, is to rupture the bag of waters as soon as possible and either use one of the rubber bags or tampon the cervix and vagina with sterile gauze. This will control the hemorrhage and bring on labor pains in a short time, and the cervix will soon be dilated enough, without taking the risk of lacerating by manual dilatation, to proceed with the second stage of labor, which should be made as short as possible to be consistent, using the forceps if indicated. For central placenta praevia, manual dilatation, forcing a way through the placenta and bringing down a leg to control the hemorrhage. If the child is viable, of course rapid delivery is indicated; if not, there is no special indication for hastening the second stage of labor, which hastening predisposes to postpartum hemorrhage. The third stage is completed by manual removal of the placenta.

The after-treatment is very important. The head of the bed should be lowered and the patient kept very quiet, watched closely and given stimulants and saline infusion, or whatever treatment may be indicated—and do not forget that the low location of the placenta perdisposes to post-partum hemorrhage and infection.

REPORT OF CASE.

On February 17th, I was called, in the absence of the family physician, to see Mrs. A., on account of a sudden hemorrhage, coming on as she arose from the breakfast table to pour a cup of coffee. She stepped into the kitchen and called her husband. He picked her up and carried her into the bed room, leaving a streak of blood behind him. I arrived about thirty minutes later, and found a very nervous patient and an excited family. The patient said the hemorrhage had stopped. I gave her one-fourth grain of morphine, hypodermically, and then prepared for an aseptic examination.

There had been one normal labor, six years ago, and one miscarriage four years ago; otherwise her previous history was perfect. She was in the seventh month of gestation. On examination I found the vagina filled with clotted blood, the cervix dilated to the size of a nickel, with rather a boggy feel. When the finger was introduced the placenta was readily recognized. I did not detect any hemorrhage at the time. I withdrew from any further examination, requested the patient to be very quiet and invited her husband to the next room. I told him of the seriousness of the case and asked for a consultant. By the time the consultant arrived I had everything prepared to tampon and deliver. After he had examined the patient we decided to tampon, expecting thus to control hemorrhage and bring on labor pains. We left the first tampon in place for twelve hours without stimulating any pains. It was then removed. About half of the gauze was saturated with blood but no hemorrhage followed its removal. We found the cervix unchanged. The second tampon was placed, with the same object in view, but there was no result, and in twelve hours this tampon was removed. It was as free from blood as it was when placed, so we decided to keep the patient quiet in bed and wait for further developments. On the ninth day, while the patient was lying in bed, a sudden hemorrhage came on, almost completely exsanguinating her before either of the attendants could arrive.

On examination, we found the cervix dilated to the size of a dollar, with labor pains in progress. We ruptured the bag of waters and placed a tampon to control the hemorrhage. The two combined brought on active labor and a living child was delivered in two hours, but it survived only a short time. If we had delivered at the time of the first hemorrhage, I believe we would have saved the child. Twenty-four hours after delivery the patient had a temperature of 102°, which continued to go higher until on the sixth day it reached 104°, and remained there for fourteen days, when it terminated by crisis. The temperature was sub-normal for nine days. She never suffered with any pain, or at least enough to require a sedative other than something for insomnia, but she was very tender on pressure over the left tube and ovary. There was never any diffuse tenderness over the abdomen. The lochial flow was about normal, lasting twelve days, and there was no odor to it. I will not discuss the treatment, other than to say that it was symptomatic.

Our patient made a slow recovery, was not discouraged by her misfortune, and is now a mother of a boy two months old.

ABSTRACT OF DISCUSSION.

Dr. J. J. Hanna, Quanah, said: Rapid dilatation and delivery is the best procedure in late cases of placenta praevia; it gives best percentage of mothers and babies.

Dr. R. C. Whiddon, Gainesville, said: Those physicians who have to do with the delivery of these cases are the best and most conscientious practitioners in the world. I think this fact may sometimes cause a delay of the more radical measures

which would save more lives. I think the case cited by the doctor should by all means have been delivered at the time of the first hemorrhage.

Dr. J. M. Inge, Denton, said: In the course of my experience, I have known three or four women to die, not from loss of blood at the time of delivery of the child, but on account of the loss of blood in the aggregate, having lost blood at various times, and probably in spite of the efforts of the physician to prevent hemorrhage by tampons and other methods. Therefore, I consider the safest method to pursue in such cases is, when the woman is found in a condition of impending danger from hemorrhage, to deliver her with reasonable promptness, even if in order to do so we must resort to Caesarian section. Of course, every case is a law unto itself, and if we find we can deliver promptly by dilatation and version without the loss of too much blood and time, it is best to do so.

SOME PATHOLOGICAL CONDITIONS OF THE BREASTS.*

BY

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Pathological breast conditions easily form themselves into two groups—encapsulated and non-encapsulated. Let us imagine that we have before us typical examples of some of these conditions and are to determine their character by gross and microscopic examinations:

Simple Retention Cyst.—Is definitely encapsulated; may fluctuate; fluid is thin, yellow to brownish color; the inner wall of the cyst is thin and smooth. Microscopically, there is nothing of importance. Dr. Bloodgood bids us beware of apparently simple cysts which show blood in their contents, for in the experience of the Johns Hopkins clinic, each such cyst has shown a small carcinomatous area in its wall.

Cyst With Papillomata in the Wall.—Is definitely encapsulated; contents may be hemorrhagic; walls show branching papillomata, extending into the interior of the cyst.

Simple Adenoma.—Is encapsulated; cuts with little resistance; is soft tissue; of white or flesh color; may exude a substance like milk; is not adherent to the skin or to muscle fascia, but is intimately associated with glandular structure. Microscopically, shows glandular tissue with delicate connective tissue stroma.

Adenofibroma.—Is definitely encapsulated; cuts with some resistance; feels more or less firm; is grayish white, with small adenomatous areas projecting above the cut surface; is easily peeled out of its capsule, as a rule. Microscopically shows glandular areas, set in a more or less dense fibrous tissue.

Fibro-Adenoma.—Is definitely encapsulated; cuts with much resistance; is a firm tumor; glistening, pearly gray; adenomatous areas are less prominent; may peel out of the capsule fairly easily. Microscopically shows scattered glandular areas in dense fibrous tissue.

Intracanalicular-Fibro-Myxoma.—Is encapsulated and lobulated; cuts with an elastic feel; roundish, myxomatous lobules project above the surface, and give rather a translucent appearance. Elasticity of tumor is characteristic. Microscopically, myxomatous tissue is seen to predominate around the ducts and alveoli; is intermingled with fibrous connective tissue in other parts of the tumor.

If we bear in mind that any tumor containing epithelial tissue also contains a potential cancer, and any tumor containing fibrous connective tissue or its modifications, also contains a potential sarcoma, the necessity for removal of all growths of the breast is apparent.

Before considering some of the non-encapsulated groups of breast lesions, let us consider briefly the lymphatics of the breast.

Through its lymphatics, the breast communicates with the axillary, subclavian, supraclavicular, mediastinal and inguinal lymph nodes, and with the fascia of the pectoral muscles, the overlying skin, the opposite breast, the liver and the spinal canal.

Handley of London (1906), thinks that emboli of cancer cells are not transmitted by the larger lymphatics until late in the disease. He believes that cancer is spread by a "permeation" of the smaller lymphatics and direct growth of the cancer cells along the small lymphatics as a path, as it were. He demonstrated such a "permeation" in the lymphatics which connect the skin and the fascial lymphatic plexus. The defensive process of perilymphatic fibrosis may cause the disappearance of permeated lymphatics in the zone nearest the tumor. Isolated, secondary cancerous nodules may be points where this perilymphatic fibrosis fails to check the growth of the cancer cells.

Handley also explains visceral dissemination as the result of permeation along the fine anastomoses which connect the fascial lymphatic plexus with the subendothelial lymphatic plexus of the pleura, peritoneum, etc. The cancer cells may then easily erode the endothelial lining membrane, escape into the pleural or peritoneal cavities and be implanted upon the viscera. Handley's work has done much to cause surgeons to remove wider areas of skin, thereby decreasing the percentages of local recurrences.

Acute inflammatory conditions of the breast do not concern us very much, as they are usually easily diagnosed. Chronic mastitis, chronic abscess, tuberculosis, and tertiary syphilis of the breast, are of interest in their differentiation from malignant conditions.

In *Tuberculous Mastitis,* the cut surface may

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*Read before the Section on Pathology, State Medical Association of Texas, Fort Worth, May 6, 1915.

show small or large caseous areas, especially in alveolar regions, and sections show the same as tuberculosis elsewhere. In these days of the Wassermann reaction, we would hardly be guilty of cutting down upon a gumma or diffuse syphilitic inflammation of the breast, to make a diagnosis. The possibility should be considered, however, in all cases with a doubtful specific history.

Since Rodman and Deaver state that perhaps every cancer is preceded by a chronic cystic mastitis, we can not do better than to consider chronic mastitis and its accompanying changes somewhat in detail. MacCarty, in *Surgery, Gynecology and Obstetrics,* March, 1914, has given us an excellent description of the progressive hyperplasias associated with chronic mastitis. He reminds us that in normal breast tissue the alveolus contains a differentiated cellular lining, with a few scattered, undifferentiated germinal cells underlying.

Primary Hyperplasia he describes as still showing the inner differentiated cells but with an activity on the part of the undifferentiated cells, whereby they show up prominently.

Secondary Hyperplasia shows a disappearance of the inner differentiated cells and an active proliferation of the germinal or undifferentiated cells—potential, if not actual cancer.

Tertiary Hyperplasia shows these germinal or undifferentiated cells overcoming the connective tissue basement and infiltrating the interstitial tissue—true cancer.

He groups together as one and the same, Billroth's *Mastitis Cystica Chronica, von Recklinghausen's Disease, Reclus Disease, Bloodgood's Senile Parenchymatous Hypertrophy, Warren's Abnormal Involution,* etc.

Tertiary Hyperplasia, or true cancer, displays several different types, according to the proportion of the glandular tissue to the interstitial tissue.

Scirrhus Cancer contains the most interstitial tissue; cuts with much resistance; tumor is very hard; surface gives gritty scrape with the knife; is non-encapsulated, but may be somewhat circumscribed with prolongations into the surrounding tissue. If the tumor is small, there may be a cupping of the surface. Microscopically, cords of cancer cells are seen set in dense, fibrous tissue stroma.

Adeno-Carcinoma presents a less dense fibrous tissue framework than scirrhus, hence cuts with less resistance; the glandular elements may be seen as grayish masses, projecting above the cut surface. Microscopically, cancerous areas suggest a glandular arrangement.

Carcinoma Simplex stands midway between the scirrhus and medullary types, being more cellular than the scirrhus, and containing more fibrous tissue than the medullary.

Medullary Carcinoma is the most cellular type, and also the most readily metastasized. It cuts with little resistance, the tissue is very cellular and soft, and has been compared to brain tissue. It may be mistaken for periductal sarcoma.

The condition described by Bloodgood as *comedo-adeno-carcinoma* corresponds more nearly to MacCarty's *secondary hyperplasia.* In comedo-adeno-carcinoma, the tissue cuts with resistance; the section shows many small, yellowish areas, in fibrous tissue. Worm-like bodies may be pressed out of these yellowish areas. Microscopically, the proliferation of epithelium seems confined to the interior of the ducts. Only in very far advanced cases do the proliferating cells penetrate the basement membrane. Bloodgood considers this type of cancer the least malignant of all.

I wish to present a case which in my estimation corresponds to Rodman's description of periductal sarcoma.

Mrs. P., age 37, with two children, the youngest three years old. The breast was struck by the baby's head and became sore. One week later the breast was red, swollen and slightly painful. Ten days after the injury, the breast was lanced for a supposed abscess, but no pus found. The case came to Dr. J. T. Moore twenty-four days after the injury. The breast at that time was red, swollen, not tender, not hot, with a slight discharge of pus from the stab drainage wound. The glands in the axilla were palpable. Four *x*-ray treatments were given before operation, and several after operation.

The breast showed a large area of soft, friable tissue, with some small cysts, filled with a yellowish, degenerated substance. Grossly, the tissue resembled medullary carcinoma. Microscopically, these soft, cellular areas were seen to be composed of cells of endothelial and small round cell type, with an apparent degeneration and disappearance of the glandular alveoli. The lymph nodes showed hyperplasia but no metastasis. This patient is well, after four years and one month.

In closing, I would like to quote MacCarty of the Mayo Clinic, again. He suggests this plan in dealing with breast lesions.

"The conditions which are associated with classical clinical signs of carcinoma should be treated radically.

"The doubtful cases in women near or over 35 years of age, should have the entire mammary gland removed for immediate examination. If primary or secondary hyperplasia be present, nothing more should be done; if tertiary hyperplasia be present, a radical operation should be performed.

"In doubtful patients near or under 35 years of age, a wide section of the mammary gland, including the pathological conditions, should be removed for examination. If primary hyperplasia be present, nothing more should be done. If secondary hyperplasia be present, the rest of the mammary gland should be removed; and if tertiary hyperplasia be present, the radical operation should be accomplished."

ALLERGIC REACTIONS IN PREGNANCY.*

BY
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The diagnosis of pregnancy frequently offers many difficulties and assistance of any kind is often desirable. The closest attention to the history, with a most careful physical examination, often leaves the most conscientious clinician in doubt. Consequently, it is but natural that one should look for help to the laboratory worker, who has given such signal aid in other directions. The physiologist and the pathologist have accepted the burden and begun investigation in various directions, with the hope of determining some means of correctly diagnosing pregnancy. Work which has yielded results in other conditions has been applied here. New developments have been made the basis of experimentation in this direction.

The most casual observer will note that the greater portion of the work done has been on the basis of a reaction of one kind or another, between mother and child. The effort has been uniformly to find in the blood of the pregnant woman some substance peculiar to pregnancy and caused by the presence of the fetus in utero. The fetus has been considered a foreign body and, as such, is presumed to be the cause of whatever changes may be found in the maternal blood stream. Two well defined and antagonistic views are possible: The relationship between the mother and child may be mutually advantageous, (1 and 2) benefiting both mother and child, or it may be as Ewing (3) expresses it, a condition of "prejudicial parasitism." That the latter view is held by the majority of workers is evidenced by their lines of action, which are based on the idea that there is one or another form of antagonism, invasion and protection. While the fetus is within the mother's body, and nourished by her blood, it is yet a thing apart, against which the mother must protect herself. This belief is not new but has only recently received such substantiation as to demonstrate its probable truth.

The occurrence of toxemia and eclampsia led the clinician to accuse the fetus of provoking these conditions. The finding of chorio-epithelioma, demonstrating the possibility of invasion by fetal elements, is added evidence. The finding of chorionic cells in the maternal circulation in normal pregnancy as early as the first month, which was demonstrated by Veit, Schmorl and Weichard, Peters, Strahl, Beneche, Brice and Teacher, was sufficient evidence of an invasion to make this conclusion inevitable.

In 1908 Brieger and Trebing (4) first showed an increase in the antitryptic power of serum in pregnancy. This was supposed to bear some relationship to the increased metabolism in early pregnancy. This has been confirmed by Jochmann (5), Rosenthal (6), Franz and Jarish (7), very recently by Chotzen (8), and many others. They have all found the antitryptic titer to be increased in pregnancy, beginning practically at the time of the implantation of the ovum. Far from being specific, however, this condition was found in "carcinoma, exophthalmic goiter, nephritis, infectious fevers, some gynecologic affections, the puerperal state and recent abortion" (9). According to Schwarz (10), the antitryptic titer is of scientific value only as it is associated with all conditions producing increased proteid destruction.

On the theory that sensitization of the mother by fetal elements might occur, Rosenau and Anderson (11) produced anaphylaxis in guinea pigs by repeated injections of guinea pig placenta, but failed with fetal serum. Thies (12), and later Lockemann and Thies (13), using fresh fetal rabbit serum, obtained a positive result from the first intravenous injection of pregnant rabbits in 43 per cent. A second inoculation proved positive in 100 per cent. No nonpregnant animals showed symptoms from the first, but 56 per cent. reacted from the second injection. Mosbacher (14) has sensitized guinea pigs with fetal serum, and later gotten anaphylactic shock with placental filtrate. This probably justifies the conclusion that the mother is sensitized by placental elements and that a small amount of "placental antigen" is also present in fetal serum. This conclusion is not accepted by Falls and Bartlett (15), who refer to the negative results gotten by Heyde, Fromme and Esch, who found in the pregnant woman no sensitization to fetal serum or placental extract.

Believing that antibodies should be present in the maternal serum during pregnancy, it was but natural that an attempt should be made to utilize the complement fixation method, which has been of such distinct value in other conditions. Fieux and Mauriac (16), Bar and Daunay (17), and later Murray (18), have reported positive results in the first three months of pregnancy, but not later. Foulkrod (19), who has recently attempted the same work, reports negative results, but believes it possible to develop such a reaction. Schwarz (20) reports an attempt at this work, but with mostly negative results. Later, repeating Streising's work, he obtained cleavage of placental protein, with inactivated serum, to which normal male serum had been added.

*Read before the Section on Pathology, State Medical Association of Texas, Fort Worth, May 6, 1915.

This, although needing confirmation, leads him to suspect that the "protective ferments" are of the nature of amboceptors.

In 1910, Abderhalden (21) published the results of his work, based upon his theory of "protective ferments." The findings previously reported of placental cells in the maternal circulation, naturally led to the suspicion of a maternal protective mechanism, which should not differ from that found following the praenteral introduction of other proteins. His results were good but failed to attract much attention. In 1912, appeared his first announcement (22) of the diagnosis of pregnancy by the dialyzation method. Soon others took up this work, following more or less consistently his technic, until the literature has already become voluminous.

The theory upon which this work is based is now generally known. Briefly, it is believed that the parenteral introduction of a foreign protein stimulates the body to the production of an enzyme or ferment, which is specific for this particular protein, and the function of which is the digestion of this protein, thereby removing a foreign, and, consequently, a deleterious substance from the blood stream. If placental cells enter the maternal circulation they are, to the maternal circulation, foreign and should *a priori* stimulate the production of a specific ferment. If this ferment is present it should, under proper conditions, digest placental protein *in vitro*. If the ferment is specific, its discovery means necessarily the immediate or recent presence of placental elements. Wohl (23), while subscribing to the theory and the value of the practical application, believes that "the formation of ferment could hardly be ascribed to the detachment of chorionic villi, for ferments have been shown to be present even from 14 to 21 days after delivery. Also, ferments are found in the blood of pregnant mammalia, the placenta of which does not possess chorionic villi, such as the mare. Thus, the explanation of the formation of ferments has had to be modified, and it is now believed that they result from a disturbance of the metabolic processes of the cells in the vicinity of the placenta penetrating the surrounding tissue which, as a result of these disturbed metabolic processes, eliminates elements foreign to the plasma with consequent production of ferments."

Although Abderhalden and his assistants claim to get practically perfect results, many workers have published conflicting reports. Some of these frankly claim that although ferments are present in the blood, these ferments are not specific, consequently the reaction is not a specific reaction. Others have stated that their technic was open to criticism and that their results became more dependable as their experience with the test became more extended. The position of one camp is very well summed up by Schwarz (24), who claims that the Abderhalden reaction "enables us to make a positive diagnosis of the existence or the non-existence of pregnancy at a time and under conditions which heretofore rendered a positive diagnosis impossible." Again (25), "when all the precautions insisted upon by Abderhalden are observed and when a sufficient number of control tests are employed, the test always gives positive results during pregnancy, from the end of the second week after menstruation has been passed until the fourteenth day after pregnancy has ceased to exist. The test is always negative in the absence of pregnancy and recent delivery, except in cases of chorio-epithelioma, where we naturally expect the reaction for an indefinite period after delivery." This opinion is corroborated by Franz (26), who from the study of reports on two thousand tests states that the first reports have shown the greater percentage of failures, and that enthusiasm increases with familiarity with the work. Paine (27) says the test compares favorably with the Widal and Wassermann. Wallis (28) states that the chief value of the test is in the early diagnosis of pregnancy, the differentiation of pregnancy and fibro-myoma, and the diagnosis of chorio-epithelioma.

On the other hand, we find Williams and Pearce (29) reporting positive reactions in normal controls, and claiming to get cleavage of other tissues than placenta with the serum of pregnancy. Their conclusion is that a negative result would be of value as tending to exclude pregnancy, but that a positive result is worth little. Their work has been vehemently attacked by Schwarz, who claims that their technic was entirely responsible for their results. Williams (30) lately states that he considers a negative result of greater value than a positive one. He also believes that the quantity of the ferments is diminished in toxic conditions occurring during pregnancy, which would account for the good results obtained by Mayer (31) and Freund (32) in the therapeutic use of fresh normal serum in these conditions. Rather a middle ground is taken by Jellinghaus and Losee (33), who accept the theory but believe the method too unsatisfactory for diagnostic use.

Recently Bronfenbrenner (34) and Eggstein (35), working, apparently, independently, have reached conclusions largely at variance with the general conception of Abderhalden. They claim to have shown that in a combination between immune serum and its specific antigen, auto-digestion of the serum follows. In other words, in the Abderhalden reaction there is not a digestion of placental tissue by the ferment of the serum, but the placenta

takes up antitrypsin from the serum (antitrypsin, it may be remembered, is increased in pregnancy) thereby permitting the digestion of the protein of the serum by the ferment. The dialyzable substances, then, are not derived from digestion of the placenta but from the serum, the placenta being of service only by adsorbing the antitrypsin from the serum. According to Jobling and Peterson (36), antitrypsin can also be removed by chloroform and ether or adsorbed by kaolin, starch and agar. Eggstein (35) has removed the antitrypsin with chloroform and found digestion of serum to occur in the incubator. He claims also, to with choloroform and found digestion of serum on placenta, the placenta shows no diminution in its total nitrogen content. Also, that such placental tissue is more resistant than untreated placenta, to the action of trypsin, because of its absorption of antitrypsin. He naturally concludes that the Abderhalden reaction is not specific and that a negative result is of more value than a positive. Bronfenbrenner believes that the auto-digestion of serum, following the removal of antitrypsin, is the cause of anaphylaxis and that the toxic conditions of pregnancy, in which a diminished antitrypsin is believed to be found, are probably anaphylactic. This work is extremely interesting and may produce valuable results. It at least leaves the entire question of the method of action of protective ferments undecided.

Foulkrod (19) experimented with small fragments of placental tissue, mounted as drop cultures in blood. He noted no change in fetal and non-pregnant serum but in one case saw a rapid atrophy in serum of a pregnant woman.

Warfield (37) thought that by the finding in the urine of dialyzable products reacting to ninhydrin, he could determine the presence or absence of pregnancy. Fischer (38), and Falls and Walker (39), have shown that this is not correct.

According to Schwarz (40), Abderhalden is now experimenting with the method of Gruetzner, which consists of adding placenta stained with carmin, to serum. If digestion takes place the carmin is freed and colors the serum. The results of this work are not yet at hand.

Englehorn (41), dissatisfied with the procedure advocated by Abderhalden, began experimentation along the line of a cutaneous reaction similar to Von Pirquet's tuberculin reaction and Noguchi's luetin. Assuming that the pregnant woman is sensitized to placental protein, sensitization should be demonstrable locally by intracutaneous injection of antigen. For this work Englehorn used an extract of placenta, which he called "placentin." He reports positive reactions in all cases of pregnancy after the seventh week, and negative results in all non-pregnant cases. The reaction comes on slowly, being prominent only after 36 hours, and is characterized by a central swelling with a zone of hyperemia surrounding. This disappears slowly, leaving a light brown pigmentation. He reports three cases which gave a slight reaction following an injection immediately before the onset of menstruation.

Falls and Bartlett (42) took up this work, using full term fresh placenta and preparing their "antigens" in the following ways: Extract of whole placenta; the water soluble protein; normal salt soluble protein; protein extracted with .5 per cent hydrochloric acid in salt solution; a glycerin emulsion of each of these. These were used both intra- and subcutaneously. They found little or no systemic reaction, but many cases gave a well marked local reaction. These local reactions, however, were as frequent and as pronounced in the non-pregnant as in the pregnant. The difference in the reaction was neither great enough nor constant enough to be of diagnostic value. Their conclusions, therefore, are diametrically opposed to those of Englehorn.

My own work in this direction has been done in the past few months, and covers only 22 cases. Fresh, full term placenta was washed free of blood, minced finely and extracted at 56° C. To the clear, straw colored fluid obtained was added phenol, .5 per cent. This was used as an intra-cutaneous injection. The positive reaction was as previously stated. 4 cases in which pregnancy was suspected but was later found absent, all gave negative results. 12 cases pregnant from six weeks to three months, all gave negative reactions. 6 cases pregnant from four to eight months, all gave positive reactions.

From this it is seen that we obtained no positive results in non-pregnant cases and that those cases that were well advanced in pregnancy gave positive results. The uniform failure before the third month is interesting.

I believe that there are possibilities in this line of investigation. My own results are too meager to lead to any definite conclusion, but they have been reported with the desire that others may be stimulated to take up the work. Further work may produce a preparation which will be efficient; if so, the simplicity of the test will commend it to general use.

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NARCOPHIN.—Narcophin consists of morphin meconate and narcotin meconate in molecular proportions. It is claimed to be a scientific substitute for opium and to have advantages over morphin. The Council on Pharmacy and Chemistry was unable to accept the therapeutic claims made for it. (*Jour. A. M. A.*)

DEPARTMENT OF EXTENSION

THE NATURE AND PREVENTION OF TONSILLITIS.

The tonsils are two soft, fleshy masses, situated on either side of the throat behind and above the tongue. Having the size and shape of peach seeds, they are caused still more to resemble peach seeds by the little openings, called crypts, which are seen over the surface of each tonsil.

When diseased tonsils are removed, masses of decaying material or liquid corruption, are often found at the bottom of these crypts or openings, and for this reason we believe that disease germs often enter the system through the tonsillar crypts. The commonest disease of the tonsils is an inflammation or swelling, called tonsillitis. Tonsillitis causes fever, and pain upon swallowing. It shows a tendency to occur again and again, in those who are subject to it. Repeated attacks of tonsillitis may cause the tonsils to enlarge and if the crypts are continually filled with pus, germs or decaying material, other parts of the body may suffer. Some good authorities believe that joint rheumatism is the result of diseased tonsils. It is practically a proven fact that scrofulous abscess of the kernels along the neck, is due to tuberculosis germs that enter the system through the tonsil. Diseased tonsils often contain tuberculosis germs.

The decision as to whether a given child or person should have the tonsils treated or removed, is a proper question to engage the attention of a conscientious medical man—a physician with both ability and honor.

Exposure to cold favors the development of tonsillitis. At times, the disease seems to be catching. Hence, to avoid contracting it, keep warm and dry, do not use public drinking cups; and avoid close personal contact with those who have the disease.

ADENOIDS.

Adenoids are small fleshy masses that grow from the rear wall of the air passage which leads from the nose down to the throat. At times the adenoids completely obstruct this air passage so that the child cannot breathe through the nose. In such cases the voice has a quality which denotes that the nose is stopped up. If, however, the adenoids do not completely stop up the air passage behind the nostrils, they may interfere with breathing to such an extent that the child breathes through the mouth instead of through the nose, as usual. Mouth-breathing is a sign of adenoids, and should be corrected, because a greater effort than normal is required in breathing. The mouth-breather is likely to have a face of a certain type, because the bones of the face do not develop properly if the normal air passage is stopped up. Morever, the chest of the mouth-breather is likely to be poorly developed, because of the extra suction needed to draw in the air. School teachers and psychologists state that mouth-breathing children are backward in their studies because the lungs do not supply the blood with enough oxygen, and the brain cannot do its work without plenty of oxygen.

At times it is possible to recognize adenoids without examining the child, but generally an examination is necessary before they can be recognized. The family physician, or a reliable and competent specialist, should be asked to examine every child who shows signs of mouth-breathing, flat chest, or lack of progress in school. This examination should be made early so the bones of the face and chest may grow in the proper and normal shape. The operation for removal of adenoids is free from

danger. The operator should be allowed to use ether or any other safe anaesthetic, if needed.

Adenoids are not catching.

CANCER AMONG WOMEN.

Out of 29,883 deaths of women from all forms of cancer in the United States registration area in 1913, cancer of the breast accounted for 4,514, or nearly one-seventh. Since the registration area covers only 60 per cent of the population of the country, and since the cancer death rate in general is not yet decreasing, probably a total of between 7,000 and 8,000 women die every year from this single form of malignant disease. This is more than twice as many as die of appendicitis. When it is remembered that cancer of the breast is curable, and, from its very nature, gives early evidence of its presence, this total loss of life seems, and in fact is, absolutely needless.

The responsibility for this sacrifice to ignorance must be laid to delay on the part of the patient, or to incompetent advice. It is no fault of the cancer, for there is visible evidence of its presence long before it has ceased to be a local and removable enemy. But both patient and physician may answer, "Yes, I knew there was a tumor, but it did not hurt and I did not suspect it was serious." Lumps or tumors of the breast are always serious and presumably malignant until the contrary is established. Pain, unfortunately for the patient, seldom begins in time to drive her to seek relief in the curable stage.

Over 80 per cent of tumors of the breast are malignant or potentially so. Every patient with early cancer of the breast, every physician consulted on account of it, should know that prompt and radical surgical treatment offers almost certain success. It is the only cure that is at all reliable. By the evidence of the microscope, by animal experimentation, and by clinical and surgical experience, cancer has been proven beyond question to begin as a strictly local disease. If then it is removed, in the early stage, before any involvement of adjoining or distant organs takes place, a cure is practically certain. If it is not attended to in its incipiency, and is allowed to run its course, cancer of the breast will as a rule prove fatal in about three years.

Cancer of the breast does not return when it is thoroughly removed. It was long believed that a recurrence was, as its name implies a return of the cancer after it had been completely removed. The present and undoubtedly the correct view is that in such cases the original malignant growth was not entirely removed. In other words, the recurrence is a definite and direct continuation of the original growth, of which at least a part was not removed. In too many such cases it is the patient who needlessly sacrifices her life by waiting too long, or by foolishly giving up the moment she hears the word "cancer." Remember that the surgeon cannot perform a miracle and extirpate the disease after it has had time to spread far from its local beginning. But remember, also, that probably four-fifths of all cases that are taken in hand immediately by a good surgeon are cured.

FIFTY FALSELY LABELED MEDICINES.

More than half a hundred legal actions have been terminated successfully under the Sherley Amendment to the Food and Drugs Act, which prohibits false and fraudulent claims as to the curative or therapeutic effects of drugs or medicines. Criminal prosecutions against the manufacturers were brought in 25 cases, but in 31 instances the falsely and fraudulently labeled medicines were seized while in interstate commerce. Claims made by the manufacturers for the curative powers of these preparations ranged from tuberculosis, smallpox and diphtheria to coughs, colds and scalp diseases. A number of other criminal prosecutions and seizures are pending in various Federal courts throughout the United States because of alleged violations of the Sherley Amendment similar to those which have already been tried. The officials charged with the enforcement of the Food and Drugs Act are of the opinion that the evils of the patent medicine business can be stopped only by the most drastic action.

It is pointed out that traffic in medicines for which false and fraudulent claims are made is not only an economic fraud of the worst kind, in that a worthless preparation that costs but a few cents is frequently sold for a dollar or more a bottle, but that health, and even life, is endangered by failure to secure the service of a physician in such serious diseases as tuberculosis, diphtheria, pneumonia and scarlet fever, until too late, because reliance may have been placed in the curative powers of some worthless preparation which is claimed to be a never-failing remedy. The deluded victim may not realize his danger until the disease has reached a stage too far advanced for even the ablest physicians to cope with it. Effective treatment depends in most cases on applying it during the early stages of the disease.

The following list includes preparations against which the Government's charge that they were falsely or fraudulently labeled was sustained by the Federal courts. Statements were made on the labels of, or on the circulars accompanying, the preparations intended to make the purchaser believe that the medicines were effective cures for a great variety of diseases for which they were recommended by the manufacturers or promoters. The main allegations of the Government were upheld by the courts and judgment accordingly entered in connection with each of the following preparations:

Radam's Microbe Killer; Hilton's Specific; Smith's Agricultural Liniment; Dr. Sullivan's Sure Solvent; Russell's White Drops; Stramoline; Wild Cherry Pepsin; Moreau's Wine of Anise; Dr. Herman Koch's Brand Phosphate, Celery and Gin Compound; Swissco Hair and Scalp Remedy; Cod Liver Oil With Syrup of Tar; Dr. Mozley's Lemon Elixir; Sa-Yo Mint Jujubes; Gray's Glycerine Tonic Compound; Dr. Martel's Female Pills; Quickstep, Frye's Remedy; Seawright's Magnesian Lithia Water; Hill's Aromatic Extract Cod Liver Oil, (Hollander-Koshland Co.); Black's Pulmonic Syrup; Tetterine; Laxative Quinine Tablets; Mrs. Joe Person's Remedy; Maignen Antiseptic Powder; Cranitonic Scalp Food-Hair Food; Dr. David Kennedy's Cal-Cure Solvent; Schenck's Pulmonic Syrup; Keller's Flaxseedine; Tutt's Pills; Universal Rheumatic Remedy; Green Mountain Oil; Weber's Genuine Alpine Herb Tea; Montague's Liniment; Coe's Cough Balsam; White Stone Lithia Water; Kalamazoo Celery and Sarsaparilla Compound; Quality Damiana Compound; Dennis Eucalyptus Ointment; Cassidy's 4X the Great Blood Purifier; Porter's Antiseptic Healing Oil; Ballard's Horehound Syrup Compound; Dr. Shoop's Night Cure; Dr. Shoop's Cough Remedy; Dr. Shoop's Restorative; Rheumacide; Rice's Mothers' Joy Salve; Milam; Old Jim Fields' Phosphate Dill and Gin; Stuart's Buchu and Juniper Compound; Ozomulsion; Jones' Break Up; Carswell's Liver Aid; Dr. Shoop's Twenty Minute Croup Remedy; Roger's Consumption Cure and Cough Lozenges; Roger's Inhalant; Family Physician; Dr. H. A. Ingham's Vegetable Expectorant Nervine Extractor; Father John's Medicine; Bad-Em-Salz.

MISCELLANEOUS

SECONDARY ABDOMINAL PREGNANCY, WITH SECTION; DELIVERY OF LIVE CHILD.

Mrs. I. R.—Age 34 years; married ten years; three children, youngest five years. Housewife and school teacher.

Past History.—Health good prior to last confinement at which time she had fever and probably pelvic cellulitis. Menstruation has since been regular but painful, until December 10th, 1914.

Present Illness.—On December 10th, 1914, she had a slight flow, with much cramping, the flow lasting only one day. On January 11th, she had slight flow with severe pain, necessitating morphine hypodermically, the flow lasting one day. On February 8th, she had severe pain in the right lower pelvis, followed by collapse and rather severe flow, which lasted several days (it was the opinion of the attending physician that she aborted at this time). Her convalescence was very slow, with pelvic distress, nausea, constipation and slight fever. On May 15th, she consulted her family physician, who referred her to a surgeon, who told her that she had a normal pregnancy. Her abdominal distress continued, with nausea and occasional vomiting, general lassitude and such unusual discomfort that she entered the hospital on August 3rd.

Physical Examination.—The uterus was slightly enlarged, retroverted and fixed; abdomen enlarged to the size of a normal pregnancy at full time; child could be easily palpated and could be pushed about to all parts of the abdominal cavity; foetal heart sounds feeble.

Diagnosis.—Secondary abdominal pregnancy.

She had been suffering severely for several hours, with cramp-like pain in the uterus, slight menstrual flow and with pains radiating all over the abdomen. The abdomen was opened by a left median incision, and an 8 pound baby boy lifted out. The umbilical cord was unusually large and was wrapped twice about the baby's neck. The placenta had attached itself to the greater omentum, but having its main attachment on the ruptured right tube. In detaching the placenta from the omentum it was observed that the hemorrhage was fearful. A long curved hysterectomy forcep was slipped down, catching the vessels in the broad ligament, thus stopping the bleeding. The placenta was removed, together with the right tube.

The patient had very little shock, and no fever or other sequellae. She was discharged on the 22nd day. The child lived only 24 hours, its death probably being due to malnutrition. The fluid in the abdomen was very foul. No membranes were present.

W. L. Crosthwait, M. D.

Waco, Texas, September 6, 1915.

FROM THE FRATERNAL DELEGATE TO NEW MEXICO.

Dear Doctor:

I have just returned from the meeting of the New Mexico Medical Society at Las Vegas, where I had the pleasure of delivering the fraternal greetings and compliments of the medical profession of Texas. They had an excellent program and every detail was carried out with no friction.

Their Association had about 50 members registered. Their program was excellent and included papers from such celebrities as Drs. C. E. Edson, William Senger, John R. Espey, Leonard Freeman, and O. S. Fowler, of the state of Colorado; Dr. A. W. Morton, San Francisco, and Dr. B. L. Sulzbacher, Kansas City, Missouri, all of whom furnished excellent essays, receiving much attention. There were also many excellent papers from the profession of New Mexico.

Dr. E. F. Frisbie of Albuquerque, a lady physician, was elected president, and Albuquerque was selected as the next place of meeting.

In the house of delegates an amendment to the constitution was offered providing for a president-elect, following the plan of the American Medical Association, as we did last year. Also, their committee on public policy and legislation will hereafter be known as the committee on public health and education. In their opinion it is best to drop the aggressive plan in influencing legislation at the capital and begin to educate the people as to the necessity of such medical legislation as may be needed, and to have the public demand of their legislature laws best suited to protect the public health, and to secure the co-operation of civic societies and religious denominations towards this end.

The Secretary of the Colorado State Society advocated a repeal of the present board of health and quarantine regulations and allow the country to go without until the public should demand and call upon the medical profession for advice, making the statement that we are misunderstood and our motives misrepresented every time we volunteer to assist the public in legislative matters. The majority, however, thought such a policy would be inconsistent with our past efforts and that great harm would result from such actions.

I enjoyed the meeting very much and derived a great deal of benefit from it; as you know, for the past few years I have been unable to attend the scientific sections in our own State Association.

There were many entertaining and characteristic debates. Dr. Fowler of Denver, spoke of "beating it back to the appendix," and one of his colleagues, in the course of the discussion, remarked that "Fowler was off on the kidney." In describing a certain case a physician referred to his lady patient as one who "had social aspirations and anemia." In discussing a paper on perineal repair, one gentleman remarked that "gynecology was a lost art," to which another replied that it was only the medical side of gynecology that was lost, and especially referring to the passary. An elderly physician replied, "Well it filled in mighty well all the time we used it." A surgeon, in describing the repair of the perineum as he had observed it in some localities, said "their work on the female genitalia was largely imaginary."

One of the fraternal delegates, who was the last to speak at the banquet, stated that after listening to the various fraternal greetings, especially the one from Texas, he was reminded of Tennyson's poem, "The Brook:"

"Cows may come, and
"Cows may go, but
"The bull goes on forever."

Yours fraternally,

F. P. Miller.

El Paso, Texas, September 11, 1915.

PELLAGRA CLINIC: A CORRECTION.

Dear Doctor:—On page 225 of the August number of the Journal, in the seventh paragraph, second column, reporting my series of pellagra cases treated with picric acid, appears the following:

"I here refer to 319 cases treated since July 31st, 1915, ranging from the mild to the severe type. Of this number only 3 have died, and, as stated heretofore, 2 of these died of pulmonary tuberculosis, and 1 of chronic nephritis."

I desire that you take such steps as may be taken at this time to correct this statement. The figures are all correct, except as to the number who died.

Instead of 3, as stated, 14 of the 319 cases had died up to July 31st, 1915.

I regret exceedingly that this error should have occurred, and I trust you will give the widest possible publicity to this statement. It seems that when I corrected the statistics in my paper, for the purpose of presenting the paper to the Dallas Medical and Surgical Society, I changed the total number of cases, and overlooked making the necessary change in the number of deaths. As a matter of fact, I read this portion of my paper from an insert, which insert it seems had become misplaced before the paper reached the secretary of the society before which it was read. I believe Dr. Marchman, the secretary, will bear me out in this statement. I am sure there has been no intention on my part or that of the society, to misrepresent this important matter in any particular.

Fraternally yours,

W. T. Wilson, M. D.

Navasota, Texas, September 28th, 1915.

FROM THE MEMBERSHIP COMMITTEE, SOUTHERN MEDICAL ASSOCIATION.

To Medical Men of Texas and the South:

Now as never before has opportunity and its consequent responsibility combined to challenge our progressive spirit and professional patriotism. During many years the balance of scientifi credit has apparently been in favor of the East and North, probably because of the traditional belief that we must look upward for inspiration, and to the Eastern horizon for intellectual light as for physical illumination. We of the South, seconded by our friends of the West, have wanted a way whereby the land of Crofford Long, Ephram McDowell, Marian Sims, and other illustrious pioneers might prove its title to sustained leadership in the march of progressive evolution.

It was in response somewhat to such an ambition, that the Southern Medical Association was organized, and happily, it is giving voice to the collective learning and clinical experience of the physicians who are making the medical record of the South, thus making these forceful factors available for the common good, after passing the clearing house of Friendly Criticism, such as attends full, free and frank discussion.

These facts, essentially pertinent as relating to the South as a whole, apply with immediate acuteness to Texas and its nearest neighbors, and to every conscientious practitioner in this territory we especially appeal for fraternal co-operation.

Every physician who is eligible to membership, should consider it a duty and a privilege to be identified with the Southern Medical Association, because it is performing a splendid service to the profession and benefits every medical man in the region from which its membership is drawn.

We now have a membership of over five thousand of the most progressive physicians in sixteen Southern States. The enthusiasm of its members shows that Southern physicians realize their opportunities; that they propose to do their part in the solution of health problems that affect Southern prosperity, and that they intend to aid in the movement for the advancement of Southern medicine and surgery.

The great Texas meeting will be held in Dallas, November 8, 9, 10, 11. The Southern Medical invites you—Dallas invites you, to take part in the greatest medical event Texas has ever known.

SPECIAL REQUEST.

Let every devotee to regular medicine reading this Call to Arms, immediately write to some Dallas physician of his acquaintance, or to the President of the Dallas County Medical Society, Dr. W. C. Swain, indicating the probability of his being here in November. Such information when compiled, will aid us in knowing the extent of preparation, general and special, including the big banquet to which each of you are invited with infinite cordiality. Also, write to a friend or friends to meet you; this will stimulate attendance and make reunions a delightful feature.

Write these letters promptly. Clean your sparkplugs, adjust your carburetor, and if your self-starter won't work, get the good wife to pilot you, for she too will find the glad hand in warmest welcome.

THE SOLID SOUTH FOR A BETTER PROFESSION.

Yours for two thousand new members.

Membership Committee.

ALUMNI RE-UNIONS.

Dear Doctor: As chairman of the committee on Alumni Re-Unions for the Dallas meeting of the Southern Medical Association, I am endeavoring to secure the active co-operation of all Alumni Associations that might be represented at this meeting, and I should very much appreciate your assistance in bringing the importance of this matter to the attention of the officers of these various associations. Anything that you may do to promote this result, will be greatly appreciated by me.

Very sincerely,

Jno. O. McReynolds.

ANOTHER IMPOSTER.

Dear Doctor:

From several sources which I deem reliable, I have had reports of a man, either with a similar name or assuming my name, and in other instances claiming to be a brother and associate of mine, going around over the State seeking practice, and apparently at the expense of my professional reputation. I would like very much for you to make proper notice in the Journal, calling the attention of members of the Association to this case and warning them to be on the lookout for such a man, I, of course, do not leave Waco to visit any other town seeking work.

Fraternally,

Jno. L. Burgess, M. D.

Waco, Texas, September 30, 1915.

PROPAGANDA FOR REFORM.

Alfatone.—The Council on Pharmacy and Chemistry finds that Alfatone (The Norwich Pharmacal Co.) is a worthless alcoholic cordial and therefore ineligible for admission to New and Nonofficial Remedies. The Council points out that alfalfa is good cattle feed and that only nostrum exploiters have suggested its use as a medicine for human beings. Based on the claimed composition, each maximum dose (3 fluidrams) should represent 45 grains of alfalfa, 1 grain of taraxacum, ⅜ grain of gentian, 1/100 grain of berberin hydrochloride and 27 minims of alcohol. Since the bitter drugs are present in such small amounts that the preparation is almost devoid of bitterness and as the medicinal value of alfalfa is practically *nil* it is evident that whatever action Alfatone may have is due to the stimulant effects of the alcohol. (*Jour. A. M. A.*, August 7, 1915.)

Duodenin, Armour.—Duodenin, Armour (Armour and Co.) is said to be prepared from the glandular or epithelial layer and mucous lining of the hog duodenum and to contain the maximum amount of secretin and enterokinase in stable form. The Council on Pharmacy and Chemistry held that there is no evidence for the administration of secretin or enterokinase and that, so far as the available evidence goes, these substances are inactive when

administered. The Council voted that Duodenin, Armour, be not further considered until evidence is submitted to show that there are conditions in which secretin or enterokinase are absent and that these substances may be utilized by the organism if administered. (*Jour. A. M. A.*, August 14, 1915.)

JUBOL.—Geo. J. Wallau, Inc., the United States agent of the French proprietary Jubol advises physicians to "jubolise" their intestines with "Jubol" if they suffer from constipation, hemorroids, and a long list of other conditions. The Council on Pharmacy and Chemistry held Jubol ineligible for New and Nonofficial Remedies because the composition is not declared; because grossly incorrect and unwarranted claims are made for its therapeutic action; because the name does not indicate the alleged ingredients and because so much of the composition as is declared indicates an unscientific mixture. (*Jour. A. M. A.*, August 14, 1915.)

URODONAL.—Urodonal is a French proprietary sold in the United States by Geo. J. Wallau, Inc., and is said to contain a chemical combination of lysidin, sidonal and hexamethylenamine. The Council on Pharmacy and Chemistry finds that Urodonal is ineligible for New and Nonofficial Remedies because it is marketed under inconsistent statements of composition and with exaggerated therapeutic claims; because the name is nondescriptive; the combination is unscientific and because it is marketed in patent medicine style. (*Jour. A. M. A.*, August 14, 1915.)

OIL-OF-SALT.—According to C. A. Mosso all diseases are "systemic poisons" in the body and his "Oil-of-Salt" destroys all poisons and hence cures all diseases. It is exploited chiefly to factory foremen and superintendents as a first aid treatment. From an examination in the A. M. A. Chemical Laboratory it was concluded that "Oil-of-Salt" is a mixture consisting of about ⅔ linseed oil with ⅓ of a mixture of essential oils, including turpentine, camphor and sassafras, containing a little chloride and free hydrochloric acid. It appears that "Oil-of-Salt" is also exploited under the name "First Aid Treatment" by the Pan-Alert Laboratories, Chicago. (*Jour. A. M. A.*, August 14, 1915.)

MIXED VACCINES.—There is no rational basis for the use of mixed vaccines. So far as infectious disease, the etiology of which is known, are concerned, they are caused by a single, specific organism as for instance in diphtheria, tetanus, meningitis, typhoid fever. The mere presence of a multiplicity of organisms in cultures taken from an infected region is no sign that the symptoms are due to all the organisms. The use of the stock mixed vaccines of commerce is irrational because it is based on the conception that infections are caused by more than one kind of micro-organism; it is harmful because it encourages superficial examination, slip-shod diagnosis and routine treatment without individualization; it is unnecessary because, when the physician desires to use more than one vaccine, he can inject them separately or mix them at the time of injection. (*Jour. A. M. A.*, August 21, 1915.)

FISHER REMEDY.—According to the A. M. A. Chemical Laboratory Fisher Remedy, a nostrum sold for the treatment of syphilis (five capsules cost twenty-five dollars), is composed of mercury subsulphate (Turpeth mineral) and mercury with chalk. (*Jour. A. M. A.*, August 21, 1915.)

NEWS

AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION MEETS.—The American Electro-Therapeutic Association met in Atlantic City, New Jersey, December 14, 15 and 16, in the Hotel Chalfonte. The program was lengthy, varied and quite interesting, and a large attendance was registered. Dr. G. W. Torbett of Marlin, Texas, President of the Association, delivered an address on the subject, *The Doctor's Duty and Influence as a Leader of His People.*

FORMER DALLAS HEALTH OFFICERS DINE.—Five former Dallas health officers and Dr. Edgar Loomis, who, at present holds the position, held a luncheon at the Adolphus hotel Monday noon.

The former officials were guests of Dr. J. H. Florence of Houston, who was Dallas health officer in 1898. The progress of the city health department since the city hospital was in an old frame building on the present union station site was discussed.

Those present at the meeting and the date they held office were: Dr. C. M. Rosser, appointed in 1891; Dr. V. P. Armstrong, 1893; Dr. J. H. Florence, 1898; Dr. J. H. Smart, 1902; Dr. T. B. Fisher, 1902; Dr. A. W. Nash, 1911, and Dr. E. W. Loomis, acting city health officer since June, 1915.—*Dallas Times-Herald.*

EMPTYING TEXAS JAILS OF THE INSANE.—Approximately 500 new patients have been admitted to the Southwestern insane asylum, at San Antonio, according to George Leavy, state purchasing agent, who has just ended a visit to that institution. These patients have been placed in the new ward recently completed and there is room yet for 200, but the furnishings and equipment have not yet been installed, consequently it may be a week or more before they may be admitted.

This accommodation will mean the virtual emptying of the Texas jails of insane persons whose confinement thus has been the cause of much adverse criticism. More than twenty-five came from the El Paso jail alone after the opening of the new addition to the asylum. Before the expiration of another year it is predicted that there will be no need of any insane persons being placed in a jail. —*Dallas Times-Herald.*

TEXAS PHYSICIAN TO CHINA MISSION FIELD.—Dr. Mary L. Burnham, formerly of San Antonio, but for the last year visiting and traveling in the East, reached San Antonio, Saturday morning, en route to the Presbyterian mission field in China, where she will undertake organizing a woman's hospital in the station of Tsining. She will be in San Antonio for a week, after which she will go to San Francisco, and sail from there October 2, for Tsining, Shantung, China.

Dr. Burnham went for the first time to the China mission field eighteen years ago, when she first was graduated in medicine and conducted the medical work of a Presbyterian station for ten years. The station to which she goes now is not far from the one in which she was first located, about four hours' journey from Shanghai.

This last summer Dr. Burnham was field secretary for the American International College in Springfield, Mass., a college for the special training of foreigners in American citizenship.—*San Antonio Express.*

FORT WORTH SCHOOL OF MEDICINE OPENS.—The twenty-second annual opening exercises of the Fort Worth School of Medicine was held in the Medical College Auditorium, on the morning of September 20th. A large audience, consisting of representatives and students from the various departments of Texas Christian University, of which the Fort Worth School of Medicine is a department, students, faculty and citizens, were in attendance. The University orchestra furnished music for the occasion, and there were several addresses covering a variety of subjects. Dr. W. G. Cook, as vice-president of the faculty, the Hon. Claude McCaleb, representing the mayor, Mr. H. O. McCormack,

representing the Chamber of Commerce, Professor Parks from the main department, Dr. J. H. McLean representing the State Board of Helaht, Dr. C. O. Harper from the faculty, and Dr. S. A. Woodward, dean of the medical department, addressed the gathering. It is said that the largest registration of recent years witnessed the opening of the current term of this, the next oldest institution of the kind in the State.

The National Committee for the Prevention of Blindness to Meet.—The first annual meeting of the National Committee for the Prevention of Blindness will be held in the Assembly room of the Russel-Foundation Building, corner of East 22nd Street and Lexington Avenue, New York, at 4:30 p. m., November 4th. Ex-President Wm. H. Taft will be present and will speak, and Dr. de Schweinetz, of Philadelphia, will make an address.

This organization conducts an extensive campaign for the prevention of blindness, and serves as a clearing house for all data relative to the subject. There are branches in every State, and the committee co-operates with every organization interested in the subject. The committee has assembled quite a number of interesting exhibits bearing on the subject, which are loaned to various organizations conducting campaigns of education, and a large number of lantern slides have been prepared and are for sale or loan. There are various communications printed and reprinted by the committee, which are available for distribution. Full information concerning all of these matters may be had upon application to the National Committee for the Prevention of Blindness, 510 East 22nd Street, New York City.

Chiropractic College For San Antonio.—The first chiropractic college in Texas has been organized in San Antonio, with headquarters in the Central Office Building. It was opened to students Wednesday morning, about forty enrolling. Dr. J. N. Stone, a San Antonio chiropractor and one of the oldest workers in this field, is president of the new institution. Dr. J. H. Triece is dean of the college. A charter was obtained from the state by Dr. Stone in April, 1910.

The course of study embraces 36 subjects and two and one-half years of study, without a vacation period, will be required of the students before the degree of doctor of chiropractic will be conferred. This is equivalent to four years with the usual vacation. In the event the rooms in the Central Office Building prove too small, permission has been obtained by Dr. Stone to use the lecture halls of a business college here.

Besides the officers of the institution, who will assist in teaching, a faculty of four has been appointed. This will be increased according to the enrollment of students. The other officers of the college are Dr. A. S. Hawley, first vice-president; Dr. G. E. Harley, second vice-president, and George Jones, secretary.—*San Antonio Light.*

New Hospital Building For Beaumont.—The new building of the Hotel Dieu was dedicated September 22, and thrown open to public inspection. Thanks to the incessant work of the Sisters of Charity of the Incarnate Word, Beaumont now has one of the most modern hospitals west of St. Louis. It is an institution that would be a credit to any city.

The building is four stories in height, constructed of decorative pressed brick and reinforced concrete, and cost, with equipment, about $200,000. About 200 patients can be accommodated. Private rooms are provided for sixty patients. There are four wards on the first floor. In the basement an *x*-ray, one of the finest in the south, is located. The machine cost $2,750. The main dining room, the private dining room, the nurses' lecture room, the commissary department, the kitchen and the boiler room are located in the basement. The office and reception rooms are on the first floor. The other floors are given over to private wards. The operating rooms are located on the top floor in the southeast and northeast corners of the building. These rooms are lighted by skylight and by gas and electricity. The equipment is the most modern that can be purchased.

The building is equipped throughout with combination electric and gas lighting fixtures.—*Beaumont Enterprise.*

Campaign for the Prevention of Blindness in Texas.—An Educational Campaign for the Prevention of Blindness has been conducted by the Texas Congress of Mothers and Parent-Teacher Association since the fall of 1914. An address was given on preventable blindness by the Superintendent of the Texas State Institute for the Blind during the Annual Child Welfare Conference held in San Antonio last November. At four district conferences the subject was also presented, Dr. John O. McReynolds delivering an especially fine illustrated lecture on the "Conservation of Vision" to a very large audience in Greenville, Texas. Dr. McReynolds is chairman of the Committee on Prevention of Blindness and Censervation of Vision of the Texas State Medical Association, Dallas. The next annual Child Welfare Conference will be held in Dallas, October 26, 27, 28, 1915.

In working toward the betterment of the condition of the blind, the President of the Texas Congress of Mothers purchased 1000 copies of Publication No. 3, "Directions for the Prevention of Blindness from Babies' Sore Eyes," for free distribution in connection with a study course which has been prepared for the organizations.

The prevalence of trachoma among children in Texas has been disclosed by statistics compiled from data gathered at the various "Better Baby" contests which has been held during the last year under the auspices of the extension department of the University of Texas in all parts of the State except in the far west.

New Hospital in Prospect For Dallas.—The dream of the Methodists of Texas and Dallas—the building of a large and modern sanitarium—one that will be what St. Paul's is to the Catholics and the Baptist Sanitarium is to the Baptists—is about to be realized, if plans now being worked out are successful. Already a site has been purchased for the location of the sanitarium and medical college, and the only difficulty now in the way is the building funds. That the funds, however, are about to be provided, it is learned on good authority.

The property already purchased by the Methodists as the site for their sanitarium and medical college is at the corner of Oak Lawn and Maple avenues. They have the entire block bounded by Maple, Oak Lawn, Shelby and Fairmount streets, with the exception of one lot. It is an ideal site for such an institution as it is proposed to erect, being high and far enough from the heart of the city to insure quiet and rest so necessary in many cases of illness.

An added advantage is that with the medical department of S. M. U. located at this point the medical students will have the advantage of clinics at Parkland hospital, the city institution maintained for charitable purposes. Under the laws of the American Medical Society a medical college to secure a class A rating, must have access to free clinics at some public and charity hospital. Because of the difficulty in securing clinics was one of the reasons why it was decided not to open the Southwestern Medical college, which was the college oper-

ated for a number of years in Dallas under the auspices of the Methodists.—*Dallas Dispatch.*

Dr. Flint Dead.—Austin Flint, M. D., Jefferson Medical College, 1857, aged 79, died at his home in New York City, September 22nd, from cerebral hemorrhage. Dr. Flint was born in Northampton, Mass., March 28th, 1836, the son of Dr. Austin Flint and Anne Skillings. He began his medical studies in the University of Louisville, and after two years went to Philadelphia, where the degree of M. D. was given him by Jefferson Medical College in 1857. He practiced in Buffalo for two years, and was professor of physiology in the University of Buffalo. In 1859 he moved to New York City and became associated with the New York Medical College as professor of physiology. He then served in a similar capacity in the New Orleans School of Medicine for a year. At the outbreak of the Civil War, Dr. Flint was appointed an Acting Assistant Surgeon in the Army and served for three years in this capacity in the General Hospital, New York City. He was one of the founders, and for thirty-seven years was professor of physiology in Bellevue Hospital Medical College. During six years of this time he also filled the chair of physiology in Long Island Hospital College, Brooklyn. He associated himself with Cornell University Medical College in 1898, and was professor and professor emeritus from that time until his death.

He was a fellow of the American Medical Association, an honorary member of the New York Academy of Medicine, a member of the Association of Military Surgeons of the United States and of many other learned societies. He was given the degree of LL.D. in 1885 and that of A. M. in 1894 by Princeton University, and was decorated with the Third Class Order of Bolivar by the government of Venezuela in 1891. Dr. Flint had been visiting physician since 1869, consulting physician and visiting physician to the Insane Pavilion of Bellevue Hospital since 1896; was consulting physician to the Bellevue Dispensary for nearly fifty years, and from 1874 to 1878 he served as surgeon general of the State of New York.

Dr. Flint was a prolific writer, and his encyclopedic work on the Physiology of Man, in five volumes, has gone through two editions; his treatise on Chemical Examination of the Urine in Disease, is now in its sixth edition, and his Text-Book of Human Physiology has required four editions up to the present time. He was also the author of other treatises and of many monographs and articles, chiefly on the subject of physiology, in which he specialized, and on medical biography and history.—*The Journal of the A. M. A.*

Examination For Assistant Surgeon, United States Public Health Service.—Boards will be convened at the Bureau of Public Health Service, 3 "B" Street, S. E., Washington, D. C., and at the Marine Hospitals of Boston, Mass., New York, N. Y., Chicago, Ill., St. Louis, Mo., Louisville, Ky., New Orleans, La., and San Francisco, Cal., on Monday, November 1, 1915, at 10 o'clock a. m., for the purpose of examining candidates for admission to the grade of Assistant Surgeon in the Public Health Service.

Candidates must be between 23 and 32 years of age, graduates of a reputable medical college, and must furnish testimonials from two responsible persons as to their professional and moral character. Credit will be given in the examination for service in hospitals for the insane or experience in the detection of mental diseases. Candidates must have had one year's hospital experience or two years' professional work.

Candidates must be not less than 5 feet 4 inches, nor more than 6 feet 2 inches in height, with relatively corresponding weights.

The following is the order of examination: 1, Physical; 2, Oral; 3, Written; 4, Clinical.

Candidates are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate.

Examinations are chiefly in writing, and begin with a short autobiography of the candidate. The remainder of the written exercise covers the various branches of medicine, surgery and hygiene.

The oral examination includes subjects of preliminary education, history, literature and natural sciences.

The clinical examination is conducted at a hospital.

The examination usually covers a period of about ten days.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order. They will receive early appointments.

After four years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon. Passed Assistant Surgeons after twelve years' service are entitled to examination for promotion to the grade of Surgeon.

Assistant Surgeons receive $2,000, passed assistant surgeons $2,400, surgeons $3,000, senior surgeons $3,500, and assistant surgeon-generals $4,000 a year. When quarters are not provided, commutation at the rate of $30, $40 and $50 a month, according to the grade, is allowed.

All grades receive longevity pay, 10 per cent in addition to the regular salary for every five years up to 40 per cent after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For invitation to appear before the board of examiners, address "Surgeon-General, Public Health Service, Washington, D. C."

SOCIETY NEWS.

EL PASO DISTRICT—No. 1.

Dr. F. P. Miller, El Paso, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, El Paso, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

El Paso—Dr. C. F. Braden, El Paso; 1st and 3rd Mondays, September to May inclusive.

Reeves-Ward-Pecos—Dr. O. J. Bryan, Pecos.

The El Paso County Medical Society met in El Paso, September 6th. Drs. Lloyd and Sherwood of the United States Army Medical Corps were visitors.

Dr. C. M. Hendricks read a paper on *Some Conclusions After Ten Years' Experience in the Treatment of Tuberculosis.* The paper was discussed by Drs. R. B. Homan, H. V. Jackson, W. H. Anderson, J. L. McKnight and F. D. Garrett.

Emphatic resolutions were adopted, protesting against the proposed use by the Equal Franchise League, of an unlicensed osteopath for making preliminary examinations of contestants in the forthcoming baby show, and also objecting to a prize offered for the show by Mrs. Anna Rheum.

The El Paso County Medical Society met in El Paso, September 11th, with thirty members present. The following visitors were also in attendance: Drs. Lynch, Littlejohn, Waite, Calloway and Messrs Frank and Steven Schuster.

Dr. Matson of Portland, Oregon, read a paper entitled, *Some Clinical Types of Tuberculosis*

Where Only the Much's Granules are Found. The paper was discussed by Drs. Hendricks, Waite, McKnight, Smith, Crouse, Stevenson, Rogers, Safford, Thomas, Haffner, McNeil, Strong and Gallagher. A rising vote of thanks was extended Dr. Matson for the interesting paper and discussion.

After some debate, the resolutions adopted by the society, relating to the baby show, at the last regular meeting, were reconsidered and the resolution withdrawn. A motion was then adopted directing those members of the society who are also members of the proposed Health Conference, to convey to the conference the sentiments of the society in regard to the matters covered by the resolutions.

THE EL PASO COUNTY MEDICAL SOCIETY met in El Paso, September 20th, with twenty-six members present. The following visitors were also in attendance: Drs. Petskey and Medici de Biron of Mexico, and Drs. Mason and Galloway of El Paso.

A paper entitled *Pituitary Extract in Labor*, was read by Dr. Paul Gallagher and discussed by Drs. Safford, Stevenson, Tappan, Jackson, Strong and Craige.

Resolutions, pertaining to the death of Dr. F. W. Gallagher, were read and adopted. The Secretary was directed to undertake to arrange with retail druggists for the discontinuance of the practice of placing a special label on prescriptions containing narcotics, calling attention to the presence of these drugs therein. The death of Dr. E. Alexander, a life member of the society, was reported, and a committee appointed to draw up suitable resolutions. Dr. W. L. Brown reported that the Collins case had progressed so far that Dr. Collins had found it desirable to leave El Paso for other and more congenial fields of endeavor.

DISTRICT PERSONALS.—Dr. J. M. Richmond and family, El Paso, have returned from an extended visit to California and the expositions.

Born, to Dr. Paul Gallagher and wife of El Paso, August 12th, twins, a boy and a girl.

Dr. Hugh White of El Paso, spent the months of July and August visiting his old home, Lexington, Va., and incidentally stopping over a few days in Johns Hopkins, Baltimore.

Dr. Felix Miller of El Paso, attended the Moose convention in California, in the interest of the project of securing the proposed sanitarium to be erected by that organization, for the city of El Paso.

Dr. H. T. Safford and family of El Paso, during the summer made an overland trip to Grand Canyon, in an automobile.

Dr. W. L. Brown of El Paso, made a professional trip to California, during the month of August.

Dr. G. Werley of El Paso, spent ten weeks in the clinics of Johns Hopkins Medical School, during the summer. Dr. E. T. Wilkinson, of Nacozari, Mexico, visited El Paso during August, where his wife and family are residing until conditions become more settled in Mexico.

Dr. E. B. Rogers of El Paso, spent his vacation on the Pacific Coast and various points in California.

Dr. M. B. Wesson of El Paso, spent the month of September in the lake region of the Adirondack Mountains. He spent several days in Baltimore, at Johns Hopkins, doing graduate work.

Dr. C. F. Braden and family of El Paso, visited the expositions in California during the summer.

Dr. Geo. Brunner and family of El Paso, visited the expositions on the Pacific Coast during the summer.

Dr. G. M. Hendricks and family of El Paso, visited Yellowstone Park and California during the summer.

Dr. Irving McNeil and family of El Paso, visited the old home of Dr. McNeil, in Tennessee, during the summer.

Dr. Jas. Vance and family of El Paso, spent a part of the summer in California.

Dr. B. M. Worsham and family of El Paso, visited the expositions in California during the summer.

Dr. S. T. Turner and family of El Paso, spent the summer in Alaska.

BIG SPRINGS DISTRICT—No. 2.

Dr. N. J. Phenix, Colorado, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Ector-Midland-Martin-Howard—Dr. W. F. Johnston, Big Springs; 2nd Thursday quarterly.

Fisher-Stonewall—Dr. R. I. Grimes, Sylvester; 1st Tuesday in January and March.

Jones—Dr. A. McK. Jones, Anson; 2nd Tuesday monthly.

Knox-Haskell—Dr. Judd E. Hammond, Munday.

Mitchell—Dr. T. J. Ratliff, Colorado; 2nd Monday January, April, July and October.

Nolan—Dr. A. A. Chapman, Sweetwater.

Scurry-Dickens-Kent—Dr. J. M. Bannister, Snyder; 1st Tuesday in January, April, July and October.

Taylor—Dr. L. J. Pickard, Abilene; 2nd Tuesday monthly.

PANHANDLE DISTRICT—No. 3.

Dr. W. C. Dickey, Memphis, Councilor.

District Society—Dr. T. D. Frizzell, Quanah, President; Dr. J. J. Crume, Amarillo, Secretary.

Secretaries of Sections—Surgery, Dr. F. B. Bryan, Childress; Medicine, Dr. E. H. Snyder, Canadian; Gynecology and Obstetrics, Dr. B. L. Jenkins, Clarendon; Pediatrics, Dr. S. P. Vinyard, Amarillo.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Childress—Dr. F. B. Bryan, Childress; 1st Tuesday monthly.

Collingsworth—Dr. H. B. Worley, Wellington; Tuesdays.

Dallam-Hartley-Sherman—Dr. R. L. Owens, Dalhart; 2nd Tuesday.

Donley—Dr. T. H. Ellis, Clarendon; 1st Thursday monthly.

Foard—Dr. R. L. Kincaid, Crowell; 2nd Monday quarterly.

Hale-Swisher—Dr. E. F. McClendon, Plainview; 2nd Tuesday monthly.

Hall—Dr. W. C. Mayes, Memphis; 2nd Tuesday monthly.

Hardeman—Dr. T. D. Frizzel, Quanah; 2nd Thursday monthly.

Hemphill-Roberts-Lipscomb-Ochiltree—Dr. H. C. Caylor, Canadian; 1st Monday monthly.

Lubbock-Crosby—Dr. J. T. Hutchinson, Lubbock; 1st and 3rd Tuesdays monthly.

Potter—Dr. J. J. Crume, Amarillo; 2nd Monday monthly.

Wichita—Dr. L. F. Stripling, Wichita Falls; 2nd Tuesday monthly.

Wilbarger—Dr. Richard W. Hix, Vernon; 3rd Monday monthly.

SAN ANGELO DISTRICT—No. 4.

Dr. S. C. Parsons, San Angelo, Councilor.

District Society.—Dr. J. M. Horn, Brownwood, President; Dr. R. H. Cochran, Coleman, Secretary. Next meeting, San Angelo, November 2-3, 1915.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Brown—Dr. H. C. Eargle, Brownwood; 2nd Tuesday monthly.

Coleman—Dr. R. Bailey, Coleman; 1st Thursday monthly.

Lampasas—Dr. W. D. Francis, Lampasas; 1st Tuesday March, June, September and December.

McCulloch—Dr. J. S. Anderson, Brady; 1st Monday monthly.

Menard-Kimble—Dr. W. M. Fenley, Menard.

Runnels—Dr. E. R. Middleton, Winters; 2nd Thursday monthly.

Tom Green—Dr. G. W. Nibling, San Angelo; Tuesday before full moon.

THE COLEMAN COUNTY MEDICAL SOCIETY met in Coleman, September 2nd, with nine members present. Drs. G. S. McReynolds and J. E. Robinson of Temple, were visitors.

Dr. McReynolds read a paper entitled *Post-Diphtheretic Paralysis*, and Dr. Robinson read a paper on *How to Get the Most Out of a Laboratory Examination.* Both papers were heartily discussed.

THE LAMPASAS COUNTY MEDICAL SOCIETY met in Lometa, September 7th, with seven members present.

Dr. W. M. Lowe reported a case of five months pregnancy, with incessant vomiting, in a pellagrin. The report was discussed by Drs. Ellis, Dorbandt and Dildy.

Dr. E. W. Vaughan read a paper on *Adenoids*, and exhibited a number of interesting specimens. The paper was discussed generally.

Dr. E. R. Zelner, a dentist, read a paper on *The Effect of Unclean Mouths on the General Health*, which was well received and widely discussed.

Following adjournment, those present repaired to Santa Fe Lake, 3 miles south of town, where they were treated by the local members to an old time fish fry.

DISTRICT PERSONALS.—Dr. J. D. Dorbandt and family of Lampasas, have returned from a visit to the Pacific Coast and the Exposition.

Dr. J. E. Dildy of Lampsas, attended the annual session of the American Medical Association, at San Francisco, and visited the two expositions.

SAN ANTONIO DISTRICT—No. 5.

Dr. W. A. King, San Antonio, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary. Next meeting will be held in Corpus Christi in September.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Atascosa—Dr. B. T. Yule, Charlotte; 2nd Tuesday monthly.

Bexar—Dr. W. H. Hargis, San Antonio; from October to May. 1st Thursday, Section on Eye, Ear, Nose and Throat; 2nd Thursday, Section on Medicine; 3rd Thursday, State Medicine, Public and Personal Hygiene; 4th Thursday, Obstetrics and Gynecology.

Comal—Dr. L. G. Wille, New Braunfels; 2nd Saturday quarterly.

Guadalupe—Dr. M. B. Brandenburger, Seguin; 1st Tuesday monthly.

Gonzales—Dr. W. T. Dunning, Gonzales; 1st Monday monthly.

Karnes—Dr. R. C. Youngblood, Falls City; bi-monthly.

Kerr-Kendall-Gillespie-Bandera—Dr. Wm. Lee Secor, Kerrville; 1st Monday alternate months.

La Salle-Frio—Dr. R. L. Graham, Cotulla; meets quarterly.

Medina—Dr. J. H. Fletcher, Hondo; 2nd Wednesday monthly.

Uvalde-Edwards—Dr. S. B. Hudson, Sabinal; 1st Tuesday monthly.

Val Verde—Dr. D. A. York, Del Rio; 1st Monday monthly.

Wilson—Dr. J. E. Sparks, Floresville; quarterly.

CORPUS CHRISTI DISTRICT—No. 6.

Dr. W. N. Wardlaw, Corpus Christi, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary. Next meeting will be held in Corpus Christi in September.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bee—Dr. E. P. Cayo, Beeville; Monday quarterly.

Cameron—Dr. C. W. Skipper, Brownsville; 2nd Wednesday monthly.

Hidalgo—Dr. W. R. Dashiell, Mission; 5th day monthly

Jim Wells—Dr. M. J. Perkins, Alice.

Kleburg—Dr. R. L. Mathews, Kingsville.

Nueces—Dr. A. W. Davisson, Corpus Christi; 1st and 3rd Fridays monthly.

Refugio—Dr. Roy T. Goodwin, Sinton.

San Patricio—Dr. L. J. Manhoff, Aransas Pass.

Webb—Dr. E. H. Sauvignet, Laredo; 1st Wednesday monthly.

DISTRICT PERSONALS.—Dr. and Mrs. H. J. Hamilton of Laredo, announce the marriage of their daughter, Katherine Lamar, to Captain Kirby Walker, U. S. A., August 7, 1915.

AUSTIN DISTRICT—No. 7.

Dr. T. J. Bennett, Austin, Councilor.

District Society—Dr. Z. T. Scott, Austin, President; Dr. W. A. Harper, Austin, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bastrop—Dr. P. Chapman, Smithville; 2nd Tuesday bimonthly.

Burnet—Dr. H. S. Garrett, Bertram.

Caldwell—Dr. Edgar Smith, Lockhart; 2nd Tuesday monthly.

Hays—Dr. P. J. Shaver, San Marcos.

Lee—Dr. C. M. Jones, Ledbetter; 1st Tuesday in June, September, December and March.

Llano—Dr. C. F. Darnall, Llano; 2nd Tuesday monthly.

San Saba—Dr. C. L. Behrns, Cherokee; 2nd Tuesday each month.

Travis—Dr. J. C. A. Eckhardt, Austin; 2nd Thursday monthly.

Williamson—Dr. E. M. Wood, Georgetown; 2nd Wednesday.

DEWITT DISTRICT—No. 8.

Dr. Walter Shropshire, Yoakum, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Colorado—Dr. W. G. Youens, Colorado; 2nd Wednesday February, April, June, August, October and December.

DeWitt—Dr. B. J. Nowierski, Yorktown; 3rd Wednesday monthly.

Fayette—Dr. C. M. Hoch, LaGrange.

Lavaca—Dr. Walter Shropshire, Yoakum; 2nd Tuesday monthly.

Matagorda—Dr. S. A. Foote, Bay City; 2nd Wednesday monthly.

Victoria-Calhoun—Dr. F. L. Sargeant, Victoria; 20th monthly.

Wharton-Jackson—Dr. W. B. Huey, El Campo; 3rd Friday monthly.

SOUTHERN DISTRICT—No. 9.

Dr. W. W. Ralston, Houston, Councilor.

District Society—Dr. M. F. Bledsoe, Port Arthur, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Austin—Dr. Otto E. Steck, Bellville; 1st Tuesday quarterly.

Brazos—Dr. R. J. Hunnicutt, Bryan.

Brazoria—Dr. A. J. Pollard, Alvin; 1st Thursday after 1st Monday.

Burleson—Dr. T. L. Goodnight, Caldwell.

Fort Bend—Dr. R. M. Munroe, Richmond.

Galveston—Dr. M. L. Graves, Galveston; last Friday monthly.

Grimes—Dr. E. A. Harris, Navasota; 1st Wednesday monthly.

Harris—Dr. B. T. Van Zant, Houston; every Friday night.

Madison—Dr. J. E. Morris, Madisonville; last Tuesday monthly.

Montgomery—Dr. H. W. Earthman, Conroe; 2nd Monday monthly.

Waller—Dr. R. E. Bing, Waller; 1st Monday quarterly.

Walker—Dr. J. W. Thomason, Huntsville; 2nd Tuesday bi-monthly.

Washington—Dr. R. H. Lenert, Brenham; quarterly.

SOUTHEASTERN DISTRICT—No. 10.

Dr. A. R. Sholars, Orange, Councilor.

District Society—Dr. M. F. Bledsoe, Po[illegible] Arthur, President; Dr. W. F. Thompson, Beaumont [illegible]cretary. Next meeting in Nacogdoches.

COUNTY SOCIETIES, SECRETARY AND DATE OF [illegible]ETING.

Hardin—Dr. Lee Selman, Olive; las[illegible] Saturday monthly.

Jasper-Newton—Dr. D. McMicken, Kirbyville; 4th Wednesday quarterly.

Jefferson—Dr. B. P. Holland, Beaumont; 1st Monday monthly.

Nacogdoches—Dr. T. J. Blackwell, Nacogdoches; 2nd Wednesday monthly.

Orange—Dr. A. R. Sholars, Orange; 1st Tuesday monthly.

Polk—Dr. T. H. Bates, Camden; 1st Wednesday monthly.

Sabine—Dr. W. T. Arnold, Jr., Hemphill; 2nd Wednesday monthly.

Shelby—Dr. J. H. Windham, Shelbyville; 2nd Tuesday monthly.

EASTERN DISTRICT—No. 11.

Dr. C. C. Nash, Palestine, Councilor.

District Society—Dr. E. B. Parsons, Palestine, President; Dr. E. H. Vaughn, Tyler, Secretary. Next meeting in Palestine in September.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Anderson—Dr. E. B. Parsons, Palestine; 1st Monday monthly.

Angelina—Dr. J. C. Van Nuys, Lufkin; 1st Tuesday monthly.

Cherokee—Dr. T. H. Cobble, Rusk; 4th Tuesday monthly.

Freestone—Dr. E. V. Headlee, Teague; 1st Tuesday monthly.
Henderson—Dr. A. H. Easterling, Athens; 1st Mondays.
Houston—Dr. W. W. Latham, Crockett; 2nd Tuesday monthly.
Leon—Dr. V. L. Smith, Jewett; 1st Tuesday in April; 2nd Tuesday in October.
Panola—Dr. A. M. Baker, Carthage.
Rusk—Dr. W. P. White, Henderson; 2nd Tuesday quarterly.
Smith—Dr. L. P. Tenney, Troup; 2nd Tuesday monthly.
Trinity—Dr. W. H. Pope, Jr., Trinity; 3rd Thursday quarterly.

THE ELEVENTH DISTRICT MEDICAL SOCIETY met in Palestine, September 14th, with thirty members and visitors in attendance.

Following the addresses of welcome and the usual preliminaries, the following program was rendered:

The Nature, Etiology and Symtomatology of Typhoid Fever, Dr. W. O. Funderburk of Palestine; *Some Forms of Malaria Not Mentioned in Text-Books*, Dr. B. F. Moon, Chandler; *Tubal Pregnancy*, Dr. C. C. Nash of Palestine; *Pellagra—Something New in Blood Finding and Method of Treatment*, Dr. B. F. Bell, Tyler; *Appendicitis in Children*, Dr. K. H. Aynesworth, Waco; *The Value of the District Medical Society*, Dr. G. H. Moody, San Antonio; *The Diagnosis of Pancreatitis*, Dr. H. L. McNeil, Galveston; *Practical Points in the Treatment of Stomach Conditions*, Dr. C. U. Patterson, Houston; *Conservation of Breast Milk*, Dr. J. O. Segura, Houston.

Dr. W. B. Stokes of Jacksonville, presented a clinic in the form of a case of acute left maxillary sinus trouble, which was given due attention.

In the discussion of pellagra, Dr. W. B. Collins, State Health Officer, made the statement that the rapidity of the spread of this disease in the State is appalling, and requires more of his official attention than any other disease. He states that many of the cases sent to the asylum for insanity eventually prove to be pellagra. The disease seems to be spreading most rapidly among negroes, as a class, and particularly along the Brazos river bottom. He thinks the best way to combat the disease is to give attention to sanitation and the proper cooking and serving of proper food.

Dr. C. C. Nash of Palestine, urged caution in the matter of operating on pellagrins. They do not stand operations at all well, and the symptoms of the disease may simulate many surgical diseases.

Dr. G. H. Moody of San Antonio, confessed ignorance as to the cause of the disease, but approved warmly of the treatment advocated by Dr. Bell in his paper. He thought proper nursing and dieting the best way to handle the disease in general. He thinks 80 per cent of the cases will result in a cure if handled properly. He spoke of a number of cases that had been cured for five years, and believes they are permanently cured.

Dr. H. L. McNeil called attention to the theory advanced by a number of Italian investigators, that aluminum in water is the cause of the disease. He states that investigators in the Medical Department of the University of Texas, have recently experimented with the amoeba of dysentery, attempting to produce symptoms of the disease in kittens, observing that most cases of pellagra show this parasite. Results have, however, been negative.

In discussing Dr. Aynesworth's paper on appendicitis in children, Dr. G. G. Bell urged that more care be exercised in examining children when complaining of abdominal pains, stating that many cases of appendicitis are overlooked by the ready assumption that every abdominal pain is a simple and easily relieved malady. Dr. Aynesworth, in closing the discussion on his paper, stated that the mortality ranges from 4 to 41 per cent, and that the average is about 10 per cent. He thinks that 99 per cent of these cases could be saved if the diagnosis was made in time.

This being the first meeting since the reorganization of the society, much enthusiasm was engendered by the good attendance and splendid program. Practically all of the essayists were present, and the discussions were particularly full and business-like. President Dr. Moody's paper on the Value of District Societies received particular attention and wide discussion. It was the evident intention of those members of the society present, to make the society a success, and it is expected that the next meeting will be more largely attended, and if possible, more profitable.

The following visitors were in attendance, from outside of the district, and participated in the program:

Dr. W. B. Collins of Austin, State Health Officer; Dr. G. H. Moody of San Antonio, President of the State Association; Dr. K. H. Aynesworth of Waco; Dr. H. L. McNeil of Galveston; Drs. C. U. Patterson, Jas. Greenwood and J. L. Segura of Houston.

The society will meet at Tyler on the second Tuesday in March, 1916, and a cordial invitation is extended to the entire medical profession of this State to be present on this occasion.

THE HOUSTON COUNTY MEDICAL SOCIETY met in Crockett, July 13th, with a large attendance of members and visitors. The time was devoted entirely to clinics, and the following operations were performed:

Appendicitis, by Dr. A. L. Hathcock of Palestine, assisted by Dr. Frank Barnes of Houston and Miss Loveless of Palestine; Dr. C. H. Bradley of Groveton, anesthetist.

Hare-lip, by Dr. Frank L. Barnes of Houston, assisted by Dr. A. L. Hathcock of Palestine; Dr. Geo. Barnes of Trinity, anesthetist.

Femoral Hernia, by Dr. C. C. Nash of Palestine, assisted by Dr. P. H. Stafford of Grapeland; Dr. Samuel Kennedy of Grapeland, anesthetist.

These operations were handled in the usual clinic style, and were eminently successful. The patients improved rapidly following the operation, and seemed to be pleased that they were useful as illustrations of important, every day surgical subjects.

The society voted unanimous thanks to the visiting surgeons, of whom the following were present: Dr. Frank L. Barnes, Houston; Dr. Geo. Barnes, Trinity; Dr. C. H. Bradley, Groveton; Drs. C. C. Nash and A. L. Hathcock, of Palestine; Dr. Dillard, Weches; Mr. Leverton, Grapeland, and Miss Loveless, Palestine.

CENTRAL DISTRICT—No. 12.

Dr. A. C. Scott, Temple, Councilor.

District Society—H. C. Black, President; Dr. H. F. Connally, Waco, Secretary. Next meeting will be in Corsicana, July 13 and 14, 1915.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bosque—Dr. C. C. Cate, Morgan; 1st Wednesday.
Bell—Dr. L. R. Talley, Temple; 1st Wednesday quarterly.
Comanche—Dr. Charles Ory, Comanche; 1st Thursday monthly.
Coryell—Dr. Ed. Graves, Gatesville; last Wednesday bi-monthly.
Erath—Dr. S. D. Naylor, Stephenville; 2nd Wednesday bi-monthly.
Falls—Dr. Aug. Streit, Marlin; 1st and 3rd Mondays.
Hamilton—J. H. Wysong, Hico; 2nd Wednesday monthly.
Hill—Dr. J. E. Boyd, Hillsboro; 2nd Friday.
Hood-Somervell—Dr. G. D. Ross, Paluxy; Wednesday before the full moon.
Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.
Limestone—Dr. M. M. Brown, Mexia; 3rd Thursday bi-monthly.
Milam—Dr. G. B. Taylor, Cameron; 2nd Tuesday bi-monthly.

McLennan—Dr. D. L. Eastland, Waco; 1st Tuesday.
Navarro—Dr. W. D. Cross, Corsicana; 1st Monday.
Robertson—A. J. Sharp, Franklin; 2nd Tuesday bimonthly.

District Personals.—Dr. D. L. Eastland of Waco, is spending his vacation on the Pacific Coast, making the journey by way of Denver, Salt Lake City and the northern route. He will visit the Expositions at San Francisco and San Diego.

Dr. C. L. Edgar of Cleburne, is attending clinics in New York and the East.

NORTHWESTERN DISTRICT—No. 13.

Dr. J. H. Ball, Crystal Falls, Councilor.

District Society—Dr. J. H. Eastland, Mineral Wells, President; Dr. R. A. Duncan, Graham, Secretary. Next meeting will be in Mineral Wells, October 19-20.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Baylor—Dr. C. E. Johnson, Seymour; 2nd Tuesday.
Clay—Dr. B. M. Puckett, Henrietta; 2nd Wednesday.
Eastland—Dr. W. P. Lee, Cisco; 2nd Tuesday bimonthly.
Parker-Palo Pinto—Dr. E. A. Davis, Mineral Wells; 2nd Tuesday monthly.
Stephens—Dr. J. H. Ball, Crystal Falls; 1st Tuesday quarterly.
Throckmorton—Dr. D. C. Wylie, Throckmorton.
Young—Dr. W. H. Logan, Graham; 2nd Tuesday bimonthly.

NORTHERN DISTRICT—No. 14.

Dr. A. W. Carnes, Hutchins, Councilor.

District Society—R. W. Baird, Dallas, President; Dr. H. L. Moore, Dallas, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Collin—Dr. E. L. Burton, McKinney; 1st Tuesday.
Cooke—Dr. J. R. Lewis, Gainesville; 2nd Tuesday.
Dallas—Dr. R. S. Loving, Dallas; 2nd and 4th Thursdays.
Delta—Dr. C. C. Taylor, Cooper; 1st Monday.
Denton—Dr. W. G. Kimbrough, Denton; Tuesday following 1st Monday.
Ellis—Dr. E. F. Gough, Waxahachie; 2nd Tuesday.
Fannin—Dr. E. H. H. Foster, Bonham; 2nd Thursday monthly.
Grayson—Dr. Davis Spangler, Sherman; 1st Tuesday.
Hopkins—Dr. J. H. Holbrook, Sulphur Springs; 1st Wednesday.
Hunt—Dr. M. L. Wilbanks, Greenville; 2nd Tuesday.
Kaufman—Dr. B. J. Hubbard, Kaufman; 1st Tuesday, February, April, June, August, October and December.
Lamar—Dr. W. W. Fitzpatrick, Paris; 1st Thursday.
Montague—Dr. C. F. Young, Bowie; 2nd Tuesday monthly.
Tarrant—Dr. J. J. Richardson, Fort Worth; 1st and 3rd Fridays.
Van Zandt—Dr. D. L. Sanders, Wills Point; 1st Friday.
Wise—Dr. L. H. Reeves, Decatur; 3rd Tuesday each month.

The Cook County Medical Society met in regular session in Bonham, at the home of Dr. C. R. Johnson, the President, September 14th, with a good attendance.

The public health meeting at Myra, which had been scheduled for the occasion, was postponed because of the heavy rains, which had made the roads leading to the place of meeting practically impassable.

The State Secretary, Dr. Holman Taylor of Fort Worth, and Dr. M. M. Morrison of Denison, were in attendance and addressed the society. Dr. Taylor gave the society an intimate insight into the workings of his office, and dwelt particularly on the difficulties met with in administering the affairs of the Association and the Journal, on the economical basis necessary, and called attention to the manner in which the membership of county societies could assist him not only in this work but in the securing of funds for enlarging the office force, pledging better service in proportion to the increased income. He made the statement that if one or two members in each county society should each month communicate in some manner with a single advertiser, he could nearly double the advertising patronage within a few months' time, which would enable him to practically double the size of the Journal. He stated further that there was much good material available for publication, that he was forced to decline, because of lack of space.

Dr. Morrison chose for his subject, *What and How to Teach the Public.* He laid special stress on the burden of the ethical medical profession, in the matter of public health education. He spoke extensively on the many opportunities for misapprehension on the part of the laity, in the matter of medical treatment, and pointed out that medical fakers, cultists and the like, were taking advantage of the situation to the limit. His remedy for this condition of affairs was simple. No member of the regular medical profession should lose a single opportunity to explain to the laity the true relationship of the cultist and faker to the regular medical profession, and point out that if the field were left entirely to such sectarian practitioners and advertising fakers, as many of the laity seem to desire, medical progress would be brought to a sudden and deplorable standstill, and there would very soon be no one left to stand between the defenseless public and the many ills that assail the human animal.

A vote of thanks was extended Drs. Taylor and Morrison for their trouble in attending the meeting.

The announcement was made that the county commissioners of Cook county had recently purchased grounds for the erection of a county hospital for the treatment of the poor.

The Hunt County Medical Society met in regular session in Greenville, September 14th, with the dentists and druggists of the county as formally invited guests.

Mr. W. C. Weeden read a paper on *The Attitude of the Physician to the Druggist.* The discussion following developed that the medical profession and that of pharmacy are growing closer together daily, and the frank interchange of opinion on this occasion was of great help locally. Counter prescribing and useless dispensing, received considerable attention. The free distribution of sample pharmaceuticals left physicians as a means of advertising, was condemned by both physicians and druggists alike. This practice not only forces upon the people expensive and ofttimes needless preparations, but it induces self drugging and denies the druggist a legitimate patronage. The druggists, with more or less justice, complained that a specification on the part of the prescribing physician of different makes of well known pharmaceuticals was an injustice, because thereby that many times the normal proportion of the pharmaceutical in question must be kept in stock, which increases the cost of doing business and makes an increased profit necessary, to the hurt of the patron.

Dr. D. R. Waddle, read a paper on *The Common Interest of the Physician and the Druggist, How Best Conserved.* In this discussion, the idea was advanced that the interest of the physician and druggist are identical, and that the druggist does not receive his share of the compensation incident to the cure of sick people. It was urged that the use of patent medicine in refilling prescriptions was contrary to the best interests of the public, and that the physician has not served the interest of his patients when he prescribes expensive proprietaries and habit forming drugs. The druggist should maintain his dignity, and refrain from questionable advertising methods and fradulent practices, as relates to patent medicines, so common at the present time. There seems to be a difference between the business of the druggist and the professional ethics of the pharmacist.

Dr. F. U. Meadows lead in a discussion of the

governmental care of the lower animals in contrast to that of the human. He stated that in 1909, the State of New York spent $146,980.00 on the attention of disease among humans, and at the same time $568,585.80 was spent in the protection of her fish, game and forests. He thought the hog rather fortunate in being an animal of commerce, in that he could thus enjoy the protection of the Federal government. He added that the problem of health had to do primarily with environment, including the home, street, school, business, etc. Anything which improves these conditions tends to conserve health. There is a vast difference between the provision of health laws and their enforcement. It seems to be impossible to secure legislation covering a requirement of the public health entirely, and those that are secured receive too often scant attention at the hands of officers of the law, including the juries called upon to render verdict. Every farmer in the country is carefully instructed concerning the protection of his stock, and the better breeding thereof, but receives very little information as to the care of his children or the proper breeding of the human race. People are dying on every hand from tuberculosis, a preventable disease, and the government is doing practically nothing for its control. At the same time, millions of dollars are being spent for the control of diseases affecting the agricultural and animal industry interests. It was urged, in this connection, that the government be not criticised for spending money in this direction, but rather for not spending more money in the education of the people in the matter of disease prevention and sanitation. It was further urged that a physician should be in the cabinet of the President, the better to direct the health agencies of the government, and it was pointed out that through the self-sacrificing work of the government physicians in Cuba, the question of yellow fever was forever blotted out of the consideration of our people, much to the advantage not only of human health, but of public and personal finances as well.

Mr. A. E. Edwards read a paper on *The Laymen's Estimate of the Doctor.*

The program committee announced that the next meeting would consist of clinics, the details of which would be announced later.

The Kaufman County Medical Society met in Maybank, August 3rd, with seven members and three visitors present.

The scientific work of the meeting was confined entirely to the consideration of clinical cases, of which there were several present.

During the afternoon, Dr. J. O. McReynolds of Dallas, delivered a public lecture on the subject *The Conservation of Vision*, which was well attended. Dr. McReynolds illustrated his lecture with a number of cases of trachoma in its various stages, which were taken from among the citizens of the community, immediately preceding the meeting. Dr. B. J. Hubbard, Secretary of the Society, also addressed the public meeting on the subject *The Dangers of Impure Water.*

Dr. McReynolds during the evening addressed the teachers of Kaufman County on the eye, ear and nose troubles of children, illustrating his talk with lantern slides. Close attention was given this lecture by the teachers, and it is estimated much good will result therefrom.

The Tarrant County Medical Society met in Fort Worth, September 3rd, with twenty members present.

None of the essayists for the occasion being present, the scientific portion of the program was dispensed with.

A letter from the Fort Worth Relief Association, requesting the reappointment of Dr. R. H. Gough as the representative of the Tarrant County Society, was read and the President stated that in response to this request he would take pleasure in renewing the appointment.

The question of the care of convalescent patients at the County-City Hospital was raised and discussed at length, by Drs. Gough, West and Wilmer Allison. No conclusion was reached.

A resolution was presented by Drs. Gough and Bond, requesting that the State Association remove the Tarrant County Society from the Fourteenth District, and add it to the Thirteenth District. The resolution was variously discussed, and tabled for consideration in the October business meeting of the society.

Resolutions of condolence over the death of Mrs. Ellen Van Zandt, wife of Dr. I. L. Van Zandt, were presented by the committee and unanimously accepted by the society. The committee was discharged.

The Wise County Medical Society met in Decatur, September 7th, with five members and one visitor, Dr. J. A. Gracey of Fort Worth, President of the Tarrant County Medical Society, in attendance.

Because of the small attendance, the regular scientific program for the occasion was dispensed with and the time devoted to a general discussion of pellagra, hookworm disease, the use and abuse of pituitrin, the fallacies of twilight sleep, and public health problems in general.

The Tarrant County Medical Society held its regular mid-monthly clinical meeting in Fort Worth, September 17th, under the chairmanship of Dr. Alden Coffey.

Dr. C. O. Harper reported a case seen in the out patients department of the medical college clinic, as follows: The patient showed a tumor on the right side of the face, above the angle of the jaw and anterior to the parotid gland. There was no redness, tenderness or fluctuation. According to the patient, the tumor had been gradually growing for the preceding five years. An incision under local anesthesia, showed the tumor to be simply a hypertrophied masseter muscle, and the patient made the subsequent statement that he had chewed almost exclusively on that side of the face for the preceding five or six years.

Dr. J. A. Hammock of Kennedale, presented two patients, both of whom were said to be convalescent from pellagra. He stated that the symptoms were marked, although the findings were not confirmed by the laboratory. One of the patients was markedly anemic and the other walked on crutches, and appeared to be tabetic. Dr. Wilmer Allison, discussing these cases, stated that it could not be said that they had not at one time been pellagrins, although the present appearance did not show the existence of this disease. The cases were freely discussed.

Dr. Sidney J. Wilson presented a patient, presumed to be afflicted with molluscum fibrosum, in which diagnosis several who had examined the patient concurred.

Dr. Chas. H. Harris presented a patient, a married woman, 32 years of age, who had undergone an exploratory operation at the hands of Dr. R. C. Coffey of Portland, Oregon, who reported that he had found a papilloma, intra-cystic and malignant. He had not deemed an operation advisable at the time. In February, 1914, the patient came to Dr. Harris for treatment, and he had withdrawn from three to four gallons of fluid from the abdomen, on several occasions. In February, 1915, he had

deemed it necessary for the relief of immediate symptoms to remove some of the tissue, which he did through an abdominal incision. A large amount of soft, granular material was removed, and the pathologist reported it malignant. The intestines were not observed, and Dr. Harris was of the opinion that the growth was from the ovaries. A thin fluid still flows from an abdominal fistula, but the patient is comparatively comfortable and much improved. No hope for a cure may be entertained, but the patient may expect to get relief from operative procedure for a time. The case was discussed freely by Drs. K. H. Beall, J. H. McLean, C. O. Harper, Wilmer Allison, J. A. Gracey and H. C. McCollum.

District Personals.—Drs. Funk, Brazelton, Petty and Reeves, recently addressed the teachers' institute at Decatur, on public health subjects in general and particularly as they relate to the work of the school teacher.

Ralph, the 18-year old son of Dr. Jones of Rhome, is recovering from an attack of typhoid fever.

Dr. C. C. Parrish of Gainesville, has removed to Fort Worth, and will become associated with the Southern Medical Sanitarium at that place, for the treatment of pellagra and mental diseases.

Dr. Kent V. Kibbie of Fort Worth, has returned from attending the clinics of Chicago.

Fort Worth has recently undergone a thorough revival in the matter of pure food, and the following pure food officials assisted in the local agitation: R. H. Hoffman, Pure Food and Drug Commissioner; E. H. Golaz, Pure Food and Drug Chemist, and J. K. Brim, all of the State Department at Austin, and E. H. Hummer, of the Federal Department.

Dr. F. E. Rushing of Fort Worth, has returned from Los Angeles, California, where he spent the summer in the Los Angeles County Hospital, doing special work in diseases of the stomach and rectum.

Dr. J. J. Richardson of Fort Worth, spent the summer in Chicago, taking work in eye, ear, nose and throat hospitals, to which specialty he will hereafter limit his practice. He will enter into a partnership with Dr. C. B. Simmons of Fort Worth.

NORTHEASTERN DISTRICT—No. 15.

Dr. W. H. Blythe, Mt. Pleasant, Councilor.

District Society—Dr. C. A. Smith, Texarkana, President; Dr. J. N. White, Texarkana, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bowie—Dr. E. M. Watts, Texarkana; 4th Friday.
Camp—Dr. R. Y. Lacy, Pittsburg; 1st Wednesday.
Cass—Dr. J. T. Herndon, Linden; 1st Wednesday.
Franklin—Dr. Z. C. Fuquay, Mount Vernon; 1st Tuesday.
Gregg—Dr. W. D. Northcutt, Secretary.
Harrison—Dr. J. B. Baldwin, Marshall; 1st Tuesday.
Marion—Dr. S. A. Miller, Jefferson; 1st Thursday monthly.
Morris—Dr. R. C. Farrier, Omaha; 1st Tuesday quarterly.
Titus—Dr. W. H. Blythe, Mount Pleasant; 2nd Tuesday.
Upshur—Dr. T. S. Ragland, Gilmer; 2nd Tuesday.
Wood—Dr. V. E. Robbins, Quitman; last Friday monthly.

Notice: The District Society will meet in Omaha, Tuesday, October 19, at 9:00 a. m., in regular annual session. There are matters of vital importance to come up at this time, and it is hoped that all who are interested in organized medicine in the Fifteenth District will be in attendance. The program is a good one, and the Morris County Medical Society is making arrangements to entertain us royally. There will be no waiting or delays, and the session will be conducted most expeditiously. This is the meeting for the election of officers.

C. A. Smith, President.
J. N. White, Secretary.

The Bowie County Medical Society met in Texarkana, September 24th, with thirteen members in attendance.

Dr. E. M. Watts read a paper on *The Non-Value of Fumigation*, which was freely discussed.

The Titus County Medical Society met in Mount Pleasant, September 14th, with eight members in attendance.

Dr. W. R. K. Johnson presented a clinic, which was thoroughly discussed.

An invitation was extended the members of the society to join the Tri-State (Arkansas, Louisiana and Texas) Medical Association, and participate in the program of the next annual session, which will take place at Marshall, December 14 and 15.

The Society ordered the Secretary to pay the amount due by the society to the State Association of County Secretaries.

A committee consisting of Drs. Fleming, Grisson and Kidwell, was appointed for the purpose of investigating the ethical conduct of one of the members of the society, and directed to report at the next regular meeting.

The society accepted the invitation of the Mount Pleasant Commercial Club, to hold its meeting in the future in the club room.

District Personals.—The following Texarkana physicians are attending clinics in Chicago, Baltimore and Rochester: Drs. R. H. T. Mann, T. E. Fuller, B. E. Dixon, E. H. Beck, W. K. Reed, T. F. Kittrell, Nettie Klein and R. L. Grant.

Dr. J. W. Beck of DeKalb, has resigned his position with the government, in the enforcement of the Harrison Anti-Narcotic Law, and will re-enter practice at DeKalb.

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

W. H. Hargis, President.....San Antonio.
W. H. Blythe, Vice-President.....Mt. Pleasant.
H. L. Wilder, Secretary-Treasurer.....Glen Rose.

NEW AND REINSTATED MEMBERS FROM AUGUST 30 TO SEPTEMBER 30.

Anderson County—G. H. Moss, Frankston.
Cass County—R. L. Long, Atlanta.
Collin County—Rod Neathery, Farmersville; B. F. Grounds, Blue Ridge; E. L. Hailey, Celine.
Colorado County—Leo J. Peters, Schulenburg.
Delta County—R. L. Combs, Cooper; A. C. McFarling, Ben Franklin.
Ellis County—E. F. Stroud, Waxahachie; L. B. Roebuck, Italy.
Jefferson County—Bruce Richardson, E. D. Mabry, Beaumont; G. S. Beatty, C. F. Seafers and N. A. Bussey, Port Arthur; P. S. Russell, Sour Lake; W. H Jones, Sour Lake, and A. W. Roark, Saratoga.
Jones County—W. F. P'Pool, Anson.
Medina County—W. C. Cain, Yancy.
Nacogdoches County—G. H. Turner, Nacogdoches.
Wichita County—W. B. Adams, Burkburnett.

CHANGES OF ADDRESS.

Dr. R. L. Mathews, from Kingsville to Lufkin.
Dr. W. A. McDonald, from Alto to Rusk.
Dr. R. R. Ranspot, from Waxahachie to Cresson.
Dr. G. C. Kindlet, from Temple to Dallas.
Dr. B. C. Grant, from Fort Worth to Big Lake.
Dr. J. E. Montgomery, from Rising Star to Stamford.
Dr. W. L. Bury, from Newcastle to Throckmorton.
Dr. J. W. Balke, from Evansville to Rosenburg.
Dr. E. Guajardo, from Kingsville to San Antonio.

CO-OPERATION OF COUNCILORS AND COUNTY SECRETARIES.*

BY
A. C. SCOTT, M. D.,
TEMPLE, TEXAS.

When the Secretary of the State Association of County Secretaries invited me to contribute a paper for this session, pertaining to the relations of Councilors and County Secretaries, I was disposed to beg off on account of my name appearing on the scientific program of the Association and for the further reason that I had given the subject so little thought it appeared that there was little to be said. However, since giving the subject some study, I am glad he gave me the opportunity, because a number of things have come to me in a different light, and I hope, as a result, I may become a better councilor and may help someone else to become a better secretary.

We cannot expect to accomplish much in any organization without a knowledge of its objects, aims and purposes, and we cannot appreciate our own functions as a part of the great American Medical Association without consideration of the broad foundation upon which it is built.

Permit me to remind you of the purposes of organized medicine. Extension of medical knowledge, advancement of medical science, elevation of the standard of medical education, the enactment and enforcement of just medical laws, the promotion of friendly intercourse among physicians, the guarding and fostering of their material interests, the enlightenment and direction of public opinion in regard to the great problems of State medicine, so that the profession shall be more capable and honorable within itself and more useful to the public in the prevention and cure of disease, and in prolonging and adding comfort to life.

If we adopted a single one of these purposes alone as a basis for the organization of the American Medical Association, it would indeed be good, but too limited and too narrow to merit the enormous effort given in its behalf by thousands of busy professional men and women all over these United States.

If, for instance, our work were devoted exclusively to the advancement of medical knowledge, or if our sole purpose were guarding and fostering the material interests of all physicians who were fortunate enough to obtain membership in our societies, our organization would not be above the average trade or labor organization. We should all realize that with the exception of those religious organizations, whose high purposes are aimed at the eternal salvation of souls, there is no organization on earth with a broader foundation or infused with a larger humane interest, than the American Medical Association, of which we have the honor of being members and in which we should be enthusiastic workers.

An analysis of this organization from the county society of five or more members to the great working body of perhaps over 60,000 members, shows that it has been as wisely planned as the great German military organization, but by reason of its great altruistic purposes and broad, humane foundation, it must depend upon voluntary service, for which there is often no reward other than the honor and pleasure resulting from the consciousness of having performed a duty beneficial to someone else.

Having accepted the offices of Councilor and County Secretary, it is morally obligatory upon each to enter upon his work with the proper spirit. Appreciating his ignorance of and inexperience in the work before him, he should as soon as possible gain an understanding of his duties from the Constitution and By-Laws of the Society so honoring him, and by frequent consultation with those who have had experience along similar lines. The county secretary cannot do justice to the society or himself, by turning his attention away from such duties, to be recalled only when it is nearly time for the next meeting, and then expect others who are no more interested than himself to hastily prepare for a half-baked program.

The county secretary is the mainspring of the American Medical Association. Without him the organization would be absolutely worthless, and without him the State Association and county societies would be as useless as a piece of old worn-out farm machinery, and I regret to say, that there is no officer in the entire American Medical Association whose work is so little appreciated by those who are nearest to him and receive the greatest benefits from his efforts.

Is it any wonder that county secretaries who are willing to give a good part of their time to organized medicine, become disheartened and lose hope when they have so many promises made them and broken as fast as they are made? In many instances, after having labored heroically for an interesting meeting and perhaps at the last moment sacrificed some important personal business to be present at the appointed hour, he has waited until perfectly disgusted without any one, or possibly an extremely small number of members, appearing on the scene. There seems to be a prevailing impression among the members of county societies that when a secretary accepts his office there is nothing else for them to do.

The county secretary's troubles are by no means limited to the difficulties and disappointments encountered in the arrangement of programs. Notwithstanding the fact that the other officers of the society have specified duties to perform, they almost invariably neglect them unless the secretary prods them with a good deal of regularity, and if anything goes wrong and some one has a disposition to make complaint, the secretary is sure to receive his first attention; and when it comes to the question of dues, he sometimes has as much difficulty collecting from the officers as from any other member. Then, after numerous solicitations, some fellow fails to pay his dues, and later, when he has difficulty registering at the State meeting, he has anything but complimentary words for the county secretary who, by rights, should have knocked him down and taken his dues away from him without asking him anything about it. The inertia and lack of interest manifested in many county medical societies is unfair to the secretary and a misfortune to the members themselves.

There are many reasons for this unfortunate state of affairs, and it is hard to tell which is the most important, but I am disposed to believe that chief among them is the ignorance prevailing throughout the profession as to what organized medicine can do and is doing for the good of the profession. Very few physicians really know the purposes of organized medicine, as recited in the preamble of our Constitution, and many others are so ignorant of the personal benefits to be obtained from organized medicine that they find no interest in the subject.

The mistake most commonly made by county secretaries is in placing too much confidence in the drawing qualities of a single program and, perhaps, at the same time too much confidence in the promises of members who reluctantly consent to prepare papers for the program, and his next mistake is to lose heart and relax his efforts when others fail to do their duty.

*Read before the State Association of County Secretaries, Fort Worth, May 6, 1915.

Of the 6,000 physicians in Texas, it would be a great blessing to the profession and public alike, if every single one of them were members of the State Medical Association; and the chief reason they are not members is their gross ignorance of the good which they would derive from an active membership and regular attendance upon meetings of the county, district and state societies. Very frequently those who remain outside the ranks, do so for purely selfish reasons, but if they only knew what they were losing by their isolation and could half guess the benefits which would come to them personally, they would all be more than eager to avail themselves of the opportunities which come to them unsolicited. I do not believe any one thoroughly versed in organized medicine would question the correctness of this statement and assuming that it is true, I ask the question, whose fault is it that there are so many who are not getting the benefits of this great, busy, working, philanthropic, scientific body? A complete answer is perhaps impossible, but perhaps a narrow field of vision on the part of a great many of the medical profession is the chief cause. It is so hard for many of us to see beyond the confines of our own personal interests and when we cannot rise above those interests, it is difficult for us to obtain the best results when attempting a big work for the sake of the profession and humanity.

Nevertheless, where duty calls we should unflinchingly go, and we should not fail to develop as large a range of vision as possible. If we are going to remedy the situation and give to organized medicine the assistance it must have, we must go forward with a campaign of education; but to accomplish much in the shortest possible time, we should calculate well the difficulties and handicaps with which we have to deal. The greatest difficulty in education along these lines is not with the county secretaries but with the councilors, to whom the secretaries look for much aid which never reaches them. Unfortunately, councilors are frequently selected without any thought whatever for the qualifications necessary to render them of value to the profession of the district which they are presumed to serve. Sometimes councilors are chosen who are wholly ignorant of the objects and aims of organized medicine, and sometimes without their knowledge or consent.

It so happens that these remarks at one time applied, in a measure, to me and if you will pardon a personal reference, I will make the confession that I was a councilor nearly three years before the magnitude of the office became clear to my own vision and it seems to me that I am just now beginning to understand the work that every councilor should know before he can become of real service to the district which he serves.

When the councilor gets the idea that his office is but little more than that of a referee, and that when not needed for that purpose he must, for the sake of appearances, make a social visit to his county societies occasionally, his field of vision is entirely too narrow and his work is not likely to be worth his railroad expenses at half fare rates.

Every councilor upon accepting the office, should make a careful, searching study of the purposes of the organization; then he should study, just as carefully, the circumstances, environment and mental attitude of every group of physicians in his district. When he becomes familiar with these things he will be better able to judge the kind of help which may be rendered by him and he must not expect to confine that help to a matter of sitting in judgment over unpleasant bickerings which may arise in county societies.

Chapter 6, Section 2, of the State Association By-Laws, reads as follows: "Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for the purpose of inquiring into the condition of the profession, and for improving and increasing the zeal of county societies and their members."

The matter of organizing seemed difficult and burdensome at first, but most all of that work has been completed and now the greater work remains to be done, *viz*, improving and increasing the zeal of county societies and their members, and I wish to call your further attention to the special injunction upon the Council, as a body, to communicate the views of the profession and of the Association in regard to health, sanitation and other important matters, to the public and lay press. If the councilor will do these things to the best advantage, he must first of all become interested in the county secretary, upon whose shoulders falls the great burden of the State and American Medical Association. If he does this, he will soon find that he and the county secretary constitute a working team which will accomplish incalculable things in organized medicine.

When a county society has been so fortunate as to select for its secretary a man of ability, energy and aggressive spirit, whether he knows anything about county society work or not, the councilor, by working hand in hand with him, can soon give him the assistance and encouragement necessary to make him a success. If he studies the county secretary's deficiencies and the difficulties and discouragements arising from a disinterested profession, he will be better prepared to assist him in approaching an ideal change. First of all, he must assist the secretary in educating and interesting the regular members of the society. This can be done through personal visits, personal letters, and the arrangement of interesting programs, in which every member should be urged to take part and take his turn in service, even though he contributes no more than a faithful report of some selected case. As a matter of increasing the membership, the councilor may be of incalculable service to the secretary by writing personal letters to all delinquent members and also to all who are eligible to membership. It not infrequently occurs that the county secretary when working single-handed, exhausts his patience in efforts to persuade some delinquent member to pay up or persuade some eligible physician to come and join the society. Whereas, if his efforts are backed up by a councilor who may, perhaps, reside at a remote point, the physician aimed at may become interested and take the necessary step to become a part and parcel of the organization. That you may get a better idea of how this may be accomplished, I quote the following form letter recently written, purely for the assistance of county secretaries in the 12th District:

"Dear Doctor:

"I have just received the final report of the secretary of the.....County Medical Society, and regret to note that your name has been left off the list of members who are in good standing at the present time, you having failed to pay the annual dues, which have for sometime been past due. However, I presume and hope, the matter has been purely an oversight. I feel confident that it is not your intention to drop out of organized medicine. We need you and you need organization.

"Indeed, if there were ever a crying need for regular, organized medicine to stand together, it is now, and for that reason I am writing to urge you to keep up your membership in the county society and the State Association at this time. I hope you will pardon me for calling your attention to this matter, but I am exceedingly anxious that we do not lose a single good member from our ranks.

"Please remit, without delay, to your county secretary, Dr....., and request him to send a supplemental

report at once to the State Secretary, in order that there will be no difficulty in your being registered as a member in good standing in the State Association at the Fort Worth meeting, and also that your name may not be missing from the published list of its membership.

"With kindest regards and best wishes for your success, I am,

"Yours very truly,

Here is another form letter to non-members who are eligible to membership in the County Society:

"Dear Doctor:

"I understand that you are eligible to membership in the.....County Medical Society, and I am taking the liberty of writing you in the interest of organized medicine.

"Permit me to say that we need the co-operation of every regular, respectable physician in the State of Texas, and we will appreciate your co-operation and would feel very much gratified if you would, immediately, put in your application for membership in the above mentioned society, in order that we may enter your name upon the rolls of the State Medical Association when the new list is ready for publication.

"I will be glad to have a favorable reply from you at an early date.

"Yours very sincerely,

As a result of these letters, permit me to quote two letters recently received from secretaries:

"Dear Doctor:

"I am herewith sending you duplicate of our fourth supplemental report to State Secretary, Dr. Taylor.

"I wish to thank you for your letters to the delinquents and eligibles. They are doing good. As evidence, Dr.....of.....came into the office the other day and said that he had just received a letter from you and that since so many seemed so interested in him, he was very glad to be one of ous again.

"I am going to 'phone a number of them this week and see if I cannot further urge them.

"With very best wishes and hoping to see you right soon, I am," etc.

Here is another letter of like import:

"Dear Dr. Scott:

"Please add to our enrollment the following names: Dr.....of....., and Dr.....of.....

"I thank you sincerely for getting after the delinquents —they have before had urgent solicitations from 'home' officials but to no avail.

"Fraternally,

Undoubtedly, the work of the councilor, like that of the county secretary, often fails to bring forth fruit so promptly, but when the seeds have been planted and properly cultivated, it is reasonable to expect fruit to mature in due season.

One way in which the councilor may be of material assistance to the county secretary, is to guide him safely with such matters as may be made public. If there is any one influence which will promptly cause the average physician to "sit up and take notice," it is certain judicious publicity, which may be given to the county society. Sometimes it is absolutely necessary for the society to avail itself of public influences to whip certain disinterested physicians into line. When a patron sees in the newspapers a notice of the county society meeting and those who were present, and later on asks his family physician why he wasn't there, or if he happens to see a list of the members of the county society and asks his family physician why he is not a member of the county society, he is in a much better frame of mind to act upon the next solicitations of the county secretary, in behalf of his co-operation with regular organized medicine.

While we should be careful not to go to extremes in publicity, the people are entitled to know what organized medicine is doing for them, and they surely are entitled to know who the physicians are who take an active part in the affairs of organized medicine.

Councilors and county secretaries should spare no time or effort in the promotion of active co-operation with each other. True, misunderstandings will sometimes occur between them when neither seems to be at fault, but if either appears to be slack in his duties, it is clearly the duty of the other to redouble his efforts to counteract any tendencies in that direction.

There are details in which the team work of councilors and county secretaries may be made to count to good advantage, but time will not permit their discussion here.

I am a strong believer in team work and I believe the longer a team of the right quality works together, the more dependable it is. Let us consider the qualities of a good team. First of all, they are strong and willing to work; each one is willing to carry all the burden placed upon him without endeavoring to throw off on his team-mate; they start together, pull together, stop together, stand hitched or stand without hitching. On the other hand, a bad team shows some weakness on the part of one or both. They are disinterested and soon show an unwillingness to work. There may be jealousies, lack of confidence and a disposition to balk upon the slightest provocation, much of which may be attributable to a gross ignorance of how to work. The presence or absence of these qualities is probably the greatest determining factor in the matter of efficiency in the great work assigned to councilors and county secretaries.

If we are to make ourselves worthy of the trust placed upon us by our associates in the state and county societies, we must profoundly appreciate the responsibilities placed upon us and characterize our tenure of office by energy, preseverance, patience and bull-dog tenacity, and finally adopt as our motto: "There is no Excellency Without Great Labor."

DEATHS

Dr. Francis Waters Gallagher of El Paso, died at Los Angeles, California, July 20th, 1915.

Dr. Gallagher was born in Clarendon, N. Y., in 1852, and graduated in medicine from the University of Buffalo in 1877. In 1890, he removed to El Paso from Kansas, in such a low state of health that it was thought by his friends that he would hardly reach his destination. He survived, however, and for twenty-three years served his new community as a leader in the practice of medicine. During this time he participated extensively in educational work, and served on the city school board for a term. It was mainly through his instrumentality that the El Paso County Medical Society was organized, and for several years he practically supported the county society library. He served on several occasions as Delegate to the National Tuberculosis Congress, in which subject he was very much interested. Dr. Gallagher loved his fellow man, and it was a source of constant regret to him that he could not give more time and attention to getting better acquainted with his professional colleagues, particularly. He was a friend to the young physician, and devoted much of his time to forwarding the interest of those entering the practice in his own community, asking nothing in return, except the satisfaction of seeing them succeed. It is said of Dr. Gallagher, that he would easily have been recognized as one of the great men of the world, had his health permitted him to work and live in the larger centers of civilization.

Dr. T. W. Largent of Lufkin, died at his home, September 3rd, 1915, of Tuberculosis. Dr. Largent was born in Lufkin, December 8th, 1860, and grew to manhood in the same community. His father died when he was but a small boy, leaving him as the main support of a mother and several younger brothers. He secured his education in the common schools of the neighborhood, and for a time in his early manhood taught school, that he might con-

tinue his education and at the same time support those dependent upon him. His medical education was obtained in the Memphis Hospital Medical College, from which institution he graduated in 1890. He returned to Lufkin immediately subsequent to his graduation, and opened an office for the practice of general medicine. He was a close student during his many years of practice, and took several post-graduate courses in New Orleans and New York. He served as county health officer for a number of years, which position he filled with fidelity and great ability. He was much interested in the civic affairs of his community, and served for eight years as alderman, from which position he retired voluntarily. Later he was elected mayor, and during his term of office succeeded in securing the passage of a board of health bill, of which fact he was always proud. He was president of the Angelina County Medical Society for four years, and was always a very active worker in the ranks of organized medicine. He was a Mason and a Knights of Pythias, the latter organization officiating at his funeral. He is survived by a wife, two daughters, one son, two brothers and numerous relatives further removed.

Among his professional brethren, Dr. Largent was considered one of the most ethical and beloved of men, and in his community he was highly respected and exceedingly popular. He was a useful citizen and a faithful physician.

Dr. G. W. Sims of San Antonio, died September 16th, 1915, of a pistol wound, self-inflicted. Dr. Sims had dreaded insanity for some months, and it is thought that it was in a temporary fit of insanity that he ended his life. He was widely and favorably known in San Antonio, and was respected for his personal and intellectual charms, not only by his professional brethren but by his acquaintances among the laity. He had only recently gone through an expensive municipal campaign as a candidate for commissioner, contributing both time and money to the cause he espoused. It is thought that the strain of this campaign added materially to his physical undoing.

Dr. Sims was born in Assumption Parish, Louisiana, December 26th, 1871. His early schooling was received on the plantation, consisting of about two years in all, and he began work in a grocery store at the age of twelve. In 1886, he removed with his mother to Houston, where he entered the grocery business, later accepting employment in a lumber concern of that city. In 1894, he entered the Hahnemann Medical College in Chicago, obtaining his diploma from that institution in due course of time. He was forced at this time to go west for his health, and for some time he engaged in the cattle business and mining, subsequently entering the Gross Medical College, of the Rocky Mountain University, at Denver, from which institution he was graduated in 1897.

In 1898, Dr. Sims returned to Texas, opening an office in Kerrville. The Spanish American War breaking out about this time, he applied for a commission and was accepted, serving through the war with the Third Texas United States Volunteer Infantry, as First Lieutenant and Assistant Surgeon. At the conclusion of the war, Dr. Sims remained in the service as contract surgeon, and later was sent to the Philippine Islands. His health failed him while in this service, and he retired, returning to his old home in Louisiana, where he became manager of a sugar manufacturing concern. In 1901, Dr. Sims removed to San Antonio, where he entered the practice of medicine. A year later he married Miss Matilda Kinney, and shortly thereafter removed to California, for the benefit of his wife's health. While in California he pursued various avocations, including carpentering, and in 1903 returned to Louisiana where he assisted in the erection of a large sugar mill. His first wife died while he was in California, and he married Miss Olivia Amanda Kittredge, January 1st, 1906. After taking a post-graduate course in New Orleans, he returned to Texas, and entered general practice at Karnes City. A few months later he took over the practice of Dr. L. M. Winfield at Falls City, and remained in that place until 1910, when he again removed to San Antonio. He has practiced continuously in San Antonio since that time, doing a general practice, but giving special attention to mental and nervous diseases. Dr. Sims was a member of the State Medical Association.

He was highly respected by his fellow practitioners, and his passing is much to be regretted.

BOOK NOTES

Diseases of the Nervous System: A Text-Book of Neurology and Psychiatry. By Smith Ely Jelliffe, M. D., Ph. D., Adjunct Professor of Diseases of the Mind and Nervous System, New York Post-Graduate Medical School and Hospital, and William A. White, M. D., Superintendent of the Government Hospital for the Insane, Washington, D. C.; Professor of Nervous and Mental Diseases, Georgetown University; Professor of Mental Diseases, George Washington University, and Lecturer on Phychiatry, U. S. Army and U. S. Navy Medical Schools. Octavo, 796 pages, with 331 engravings and 11 plates. Cloth, $6.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

The authors of this very excellent book have endeavored to describe the many diseases of the nervous system in the order of their development, beginning with the earliest symptoms, first dealing in neurological then mental examinations by way of introduction. In Part One, under Physico-Chemical Systems (Vegetative or Visceral Neurology), the autonomic and sympathetic systems—the internal secretions, the anatomy of the sympathetic and autonomic divisions, and special pathology, are lucidly considered with the endocrinopathies. In Part Two, the sensorimotor system is examined for all disorders and diseases, for lesions of the spinal cord, acute polioencephalomyelitis, primary progressive muscular atrophies, diseases of the brain, paralysis agitans, chorea, and belated disorders, diseases of the meninges, encephalitis, vascular disturbances and syphilis of the nervous system. Part Three: The psychic or symbolic systems; the psychoneuroses and actual neuroses; the paranoia group; epileptic and convulsive types of reaction; dementia praecox group; idiocy, imbecility, feeble-mindedness and characterological defect groups.

This will prove a valuable text-book for neurologists. The authors have tried to make it a connected story from beginning to end, showing the intimate relation between neurological and psychiatric phenomena; thus covering the whole ground of nervous and mental diseases in an easy and lucid manner, suitable to the requirements of the student. In these days of medicolegal exigencies, when men of less than ordinary educational and professional equipment are posing as experts in neuropathy and psychiatry, the plain matter-of-fact methods of statement of fundamental data outlined in this book will prove of vast importance, particularly when it becomes necessary to "show" the courts and their juries what really is taught by those who give their lives to the mastery of such complex subjects.

The work is in every respect worthy of the high place it has assumed in medical literature.

THE TREATMENT OF FRACTURES: With Notes Upon a Few Common Dislocations. By Charles L. Scudder, M. D., Surgeon to the Massachusetts General Hospital; Associate in Surgery at the Harvard Medical School. Eighth Edition, Revised and Enlarged. Octavo volume of 734 pages, with 1057 original illustration. Philadelphia and London. W. B. Saunders Company, 1915. Polished Buckram, $6.00 net; Half Morocco, $7.50 net.

Charles L. Scudder, graduate of the Medical Department of Harvard University, was born 1860, and is therefore 55 years of age. He has done enough in the medical world to entitle him to a place among the first of the profession in his time. His teaching titles and the fact that his work on fractures has passed through eight new editions, besides many reprintings, will perhaps more forcibly prove its value than anything we could say of its merits. The first copyright was issued in 1900, the eighth in 1915; so the author was mature and capable when he first offered his work for the use of the professions. He has, with an average of one revision in every two years, kept it abreast of the art he is endeavoring to teach.

The entire field of fractures is fully covered with text and illustration, the whole constitutes an easy, ready reference for the busy surgeon and the general practician. The text is perspicuous, and is illustrated on almost every page with clear, amply delineated cuts, both black and in colors. Mechanically the book is heavily and strongly bound for rough-and-ready usage. It is printed in clear type with leaded lines, on good paper, and is bound in good, strong boards.

FRACTURES AND DISLOCATIONS: DIAGNOSIS AND TREATMENT. By Miller E. Preston, A. B., M. D., First Lieutenant, M. R. C., U. S. A.; Surgical Examiner, Colorado State Board of Medical Examiners; Formerly Police Surgeon, City and County of Denver; Instructor in Anatomy, University of Denver, and Visiting Gynecologist to City and County Hospital, Denver, Colorado. With a Chapter on Roentgenology by H. G. Stover, M. D., Professor of Roentgenology, School of Medicine, University of Colorado; Member of American Roentgen Ray Society; Visiting Roentgenologist to City and County Hospital, St. Joseph's Hospital, and Children's Hospital, Denver, Colorado. Eight vo., cloth; illustrated; 813 pages. C. V. Mosby Company, St. Louis, 1915. $6.50.

The authors of this volume are both well qualified and well equipped for their undertaking, and the results show that undertaking to have been well done. The book is rich in illustrations, and what is better, the illustrations are almost all new ones; the old and quite imperfect cuts of former times having been discarded for original, direct pictures of many recent fractures and dislocations. The publishers claim more of the latter than is to be found in any other English book on the same subject, and also that almost half of the pictures were taken immediately following the injury, and that in many cases not more than fifteen minutes elapsed from the time the injury occurred until the photograph was made.

The text is well written, and the publishers have done their part to make a book worthy of the subscriber.

As an additional merit, the book contains all of Dr. Albee's work on Autogenous Bone Grafting, a subject which will command special attention from Texas surgeons because of the very earnest and scientific work being done by the Browns of El Paso.

X-RAYS, HOW TO PRODUCE AND INTERPRET THEM. By Harold Mowat, M. D., Edin. Temporary Lieutenant, R. A. M. C.; at present Officer to X-Ray Department Meerut Indian General Hospital; Radiographer to Metropolitan Hospital and Royal Chest Hospital. Small 8 vo., cloth, 204 pages. Illustrated, 10 point type, double leaded. Oxford University Press, American Branch, 35 W. 32nd St., New York, 1915. $3.00.

This is not a work on electro-therapeutics, but is devoted exclusively to the discussion of the subject designated in the title page; it is intended for the student who wishes a good, general knowledge of the technique of *x*-ray production. The book is divided into two parts. Part I is devoted, in six chapters, to the discussion of the production of *x*-rays; *i. e.*, the *x*-ray tube; sources of supply; accessories; localization of foreign bodies; technique of examination and development. Part II is devoted to the interpretation of the *x*-ray showings in the thorax, in the digestive tract, the urinary system, bone and joint injuries, and bone and joint diseases. 106 illustrations elucidate the text, and make the book all the more available for study and reference.

The author's absence in the Indian Service is offered as an excuse for what he considers defects in his work, in that he is not at liberty to refer to the copious literature of home civilization.

The physical aspects of the book are good, and do credit to this source of much good literature.

A SYNOPSIS OF MEDICAL TREATMENT. By George C. Shattuck, M. D. Second Revised Printing of the Second Edition. Price, $1.25. W. M. Leonard, Boston, Publisher.

This book presents clearly and concisely sound principles of treatment, based on known pathology. The methods described are selected from those that have been tried at the Massachusetts General Hospital and in private practice. Hence the work sets forth in detail The Post-Graduate Course in Clinical Medicine, given at the hospital by well known teachers.

The first edition was twice printed. In reprinting the second edition opportunity has been used to revise and complete minor details. The repeated editions and printings of this book indicate its practical value to physicians.

As was stated of the last printing, in a review in a prominent journal, "Of particular value is the opportunity which this little handbook affords, on gaining an insight into the important rules of treatment as carried out in one of the largest and oldest hospitals of the country. The worth of the book is out of all proportion to its size."

BOOKS RECEIVED.

Progressive Medicine, September 1st, 1915.

International Clinics, 25th Series, Vol. III. (Lippincott.)

Starvation Treatment of Diabetes, *Hill.* (W. M. Leonard.)

Clinics of J. B. Murphy, Vol. IV, No. 4, August, 1915.

Diseases of the Nervous System, *Jelliffe-White.* (Lea & Febiger.)

The Medical Clinics of Chicago, Vol. I, No. 2. (W. B. Saunders.)

Tomorrow's Topics, *Morris.* (Doubleday & Page.)

Syphilis as a Modern Problem, American Medical Association.—A. M. A.

Texas State Journal of Medicine

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7 T. J. BENNETT, *Austin.*
8 W. SHROPSHIRE, *Yoakum.*
9 W. W. RALSTON, *Houston.*
10 A. R. SHOLARS, *Orange.*
11 C. C. NASH, *Palestine.*
12 A. C. SCOTT, *Temple.*
13 C. B. WILLIAMS, *Mineral Wells.*
14 A. W. CARNES, *Hutchins.*
15 W. H. BLYTHE, *Mt. Pleasant.*

VOL. XI. NOVEMBER, 1915 No. 7

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

THE IMPORTANCE OF COUNTY SOCIETY ELECTIONS.

Undoubtedly, the welfare of the medical profession of this State is in the care and keeping of the State Medical Association of Texas. These are momentous times, and the profession will do well to bear this in mind. A period of unrest is upon us and many established customs are being upset. The thoughtful among us are striving with might and main to bring about a readjustment that will serve best the greatest number. There are wars and rumors of wars, and governments are being made and unmade over night. The money centers of the world are being shifted, and human activities are fast readjusting themselves. Recent press dispatches indicate that labor circles are alive to the situation, and are busily planning to direct the reformation of their destiny.

Never before has such an effort been made to correlate all human endeavor, and it might as well be understood first as last, that the medical profession is not going to escape this readjustment. It behooves us, therefore, to see to it that our voice is heard in the councils that do the planning. If the services of the medical profession are to be extended to any portion of the public by law, the medical profession must be in a position to dictate the terms. It will not do to wait until the lines are drawn and plans laid, to enter protest against any unfair division thereof, as was the case in England recently, when the government installed a system of health insurance on a basis extremely unfair to those who must do the work. It will not do for us to permit the installation of a similar system as a commercial enterprise under private supervision. Cults are springing up on every hand, and each is demanding the same exemptions and the same protection that have already been extended others by operation of common law. The older cults are either falling by the way-side or being absorbed by the regular profession, which is in many instances an unwholesome dilution with no compensating decrease of the total. The public is beginning to appreciate the fact that its own health is its own business, and as knowledge increases the assumption of authority is extended. It is essentially the province and bounden duty of the medical profession, to take a firm and leading hand in this impending revolution, as it pertains to the health of the public and the profession and practice of medicine.

It must be borne in mind that the State Medical Association, freighted with the great responsibility of directing these affairs, is but a combination of the several county medical societies, under an agreement represented by the Constiution and By-Laws thereof. According to this agreement, each county society is supposed to regulate the medical affairs within its own jurisdiction, with such modification of authority as may be mutually agreed upon in the House of Delegates of the State Association. If these units are weak, this important function will be ineffectually fulfilled, and the organization as a whole affected to just that extent. This brings us to our subject.

County societies will elect officers for the forthcoming year during the month of December. The success of the county society will very largely depend upon the character of the officers selected, and their fitness for the position to which they are elected. Some of the county societies are alive, very sensitive and extremely

active, and while a little politics may be observed now and then in the ranks, these societies will, for the most part, elect officers who are fit and who will perform the functions of their several offices in a creditable manner. Many of our societies are content to collect dues and perfuctorily comply with the routine requirements of the organization. These will, generally, elect officers in a manner quite haphazard, and certainly with no contest. Some of our societies are, of course, so situated that they cannot be expected to hold regular and largely attended meetings, and their members must forego many of the pleasures and much of the profit of an active medical society.

Whatever the situation, we wish to draw the attention of our readers to the extreme importance of selecting county society officers with a view to their peculiar fitness for the work they are called upon to perform. President Moody is anxious concerning this matter, which is the inspiration for this brief discussion of the subject. Let each member run over in his own mind the personnel of his county society membership, and select for himself those whom he may consider fit for each office, and stand ready when the time comes to either support or nominate, according to his honest convictions. We do not advise that a slate be made, or alliances be entered into for the selection of officers by cliques or otherwise. The idea is, to use the same judgment in selecting officers that a corporation would use in selecting directors and managers. This cannot be done in a few minutes time, or as a rush order. Whatever their qualifications may be otherwise, county society officers should be interested in the work and willing to make sacrifices for the success of their administration. Such an office is a trust, and should not be considered as a sinecure or an honor to be enjoyed for a term. We will not here discuss the functions of each office; that has been done so frequently that it is hardly worth while. We desire at this time merely to emphasize the importance of carefully selecting delegates to the State Association and censors for the county society. These two offices are generally lightly considered, and too frequently handed out to someone ready at hand as a sort of afterthought. As a matter of fact, it is the delegate who makes the laws for the State Association, and who formulates its politics. Could anything be more important than that? Likewise, it is the county society censor who has charge of the ethics of the profession locally, and who establishes local sentiment and regard for the rules and regulations of the organization. The delegates must have legislative ability, and must be willing to make sacrifices in the interest of his obligation. The censor must be of judicial mind, and must perform his duties without fear or favor. We trust, also, that the offices of secretary and president will be worthily filled, particularly that of secretary, and the promptness with which the annual meeting is held, and the report thereof filed with the JOURNAL, will serve very largely to demonstrate the appropriateness of at least this selection.

VENARSEN AND THE COUNCIL ON PHARMACY AND CHEMISTRY.

A correspondent has lately written us with regard to the methods of a certain representative of the Intravenous Products Company, which manufactures Venarsen. This proprietary, on which we commented editorially last January, was at one time a semisecret preparation, marketed and advertised in a way to suggest that it was a greatly improved salvarsan. Only recently has its composition been made public.

Our correspondent writes that the Intravenous Products Company's representative, when asked whether his preparations were approved by the Council on Pharmacy and Chemistry, replied (with much picturesque but irrelevant blackguarding of the Council) that his company had been unable to obtain a hearing. From this statement the veracity of the Intravenous Products Company—or at least of its representative—may readily be gauged. The Council passed on Venarsen this spring, the report appearing in *The Journal of the American Medical Association,* May 22, 1915. Far from having the slightest difficulty in securing a hearing, the Intravenous Products Company, as we understand from the secretary of the Council, was invited by that body to present its evidence. And, we may add, the first published statement of the actual composition of Venarsen was that furnished in the report of the Council above referred to. From

the composition of Venarsen as published by the Council and now furnished by the Intravenous Products Company, it appears that Venarsen treatment is essentially intravenous injection of sodium cacodylate. As the Council has said, the other ingredients, as well as the name, merely constitute so much systification. It might be added, that the price of sodium cacodylate in this form is rather high.

It is astonishing what a mean crowd that Council on Pharmacy and Chemistry is. It is also astonishing that physicians will accept the statements of promoters of a product, not only as to what it is but also as to what it will do, and on these statement will use the product on their patients—in this case injecting it. Previous to the creation of the Council on Pharmacy and Chemistry, physicians had to depend on their own good judgment, for there was nowhere to turn. Now there is. Why, then, are physicians so self-satisfied, and so ignorant of their own lack of knowledge about such martters, that they ignore the existence of the Council? We presume it is because the majority of physicians do not realize that this Council is in existence—and for the sole purpose of protecting them, and through them their patients, against fraud and misrepresentation regarding medicines.

POLITICAL OPTOMETRY.

With this very suggestive subject for a text, the Hon. J. L. Peeler, ex-senator from Autsin, and lobbyist for the optometrists in their most recent unsuccessful fight for legislation in this State, addressed the recent annual meeting of the Texas Opticians. According to news dispatches, Senator Peeler urged the Association to present a bill at the next session of the Legislature to protect the opticians of the State from fakers in the profession. This is preparedness, all right. It may mean that the opticians are actively engaged at the present time in laying their lines for attack during the next session of the Legislature, or it may simply mean that Senator Peeler is closing up the unfinished business of his recent employment, or that he is making a showing for the sake of future business. However, the incident is sufficient to warn the medical profession that any legislative interval represent only a lull in the battle. The precarious foundation upon which this new profession has been erected is so unsubstantial as to demand constant effort on the part of its followers to secure a firmer anchorage, which is to be expected.

The consequence of the situation is, that the optometrists approach each succeeding session of the legislation as trained veterans, and their opponents come anew to the fray. Of course, there are certain of us who have been forced to the front from year to year by virtue of the positions we occupy in the ranks of organized medicine, but in the meantime we have many other problems to consider, and in common with all others who are unselfishly concerned with the public welfare, we are too prone to consider that the righteousness of our position is self-evident and will receive recognition at the hands of thoughtful people. This is a mistake. Senator Peeler is a thoughtful and an able man, and yet he will argue with great earnestness that these tradesmen should be legislated into a profession and the people caused to consider them on a par with the medical profession when it comes to fitting the eye with glasses. There are numerous thoughtful and earnest people in the legislature and out, who will hold the same position, whether from the same motives or not. This is a question concerning which the prejudices of the people can be easily aroused, and the natural inclination is to sympathize with the under dog. The opticians are prone to pose as the under dog, thereby exciting the sympathy needed to overcome reason and understanding.

In discussing this matter during the recent session of the Legislature, we referred to the charges made in the House of Representatives by Mr. Roger Byrne, that the optometrists had undertaken to purchase his vote; we deferred to another time the discussion as to the justice of these charges. The following two paragraphs from an article on the subject of optometry legislation in Illinois, taken from the *Illinois Medical Journal,* is most interesting in this connection. We feel that we may safely assume that there will be rich picking in Texas soon—for the professional lobbyist, of course. The quotation follows:

"The optometrists have been before several previous Legislatures and expended money without stint. We are informed (we do not know how

truthfully) that a hundred and twenty thousand dollars ($120,000.00) was spent in the last Legislature in obtaining the passage of this bill. Its supporters, in great numbers, were in Springfield lobbying during the entire legislative session. Members of the committee before whom the bill was pending, as well as members of delegations appearing in Springfield to oppose the bill were watched constantly. Indeed, the spy system used by the proponents of this measure would do credit to any of the warring nations of Europe.

"So confident of its ultimate success were its sponsors that long before its passage in the House they were bold enough to try and devise a means of completely emasculating the entire medical practice act. This they hoped to accomplish, by writing into the optometry bill a few words so cunningly constructed that the real meaning would escape detection. Imagine the lives of the people of Illinois being jeopardized by turning loose to prey upon the people every form of quackery imaginable, which this attempted legislation would have brought about. The scheme failed, we are reliably informed, because of lack of a brain ingenious enough to contrive the necessary wording."

So pernicious has this matter of optometry legislation become, that the profession in the several States having to contend with the question are resorting to the expediency of publishing the vote on the subject. It appears that many of those who had promised to vote against optometry in Illinois, and who seemed to be very much in earnest in their support of the medical profession in the premises, were afterwards found to have voted for the measure. It cannot be assumed that any argument was advanced warranting their claims, for there is no possible reason why these people should practice on the eye with lenses, any more than that they should resort to similar expediencies in handling any other portion of the human body. Any one can understand that. Governor Henderson of Alabama, understood that fact full well recently, when he vetoed a measure providing for optometry legalization in his State, despite the fact that he was under the impression that the State Medical Association of Alabama had endorsed the measure. As a matter of fact, the State Medical Association of that State had done no such thing, but through an error somewhere, technically the indorsement stood. The independence and courage of Governor Henderson is a pleasant spectacle to many of us, who have been in the habit, through sad experience, of expecting quite the reverse of this action when similar matters come to a focus in this State. We feel better about it, and the suggestion is thrown out in passing that those who may happen to have influence with prospective legislators and executives, take the first opportunity to discuss this matter with them, and at a time when they are open to reason rather than to argument.

MEDICAL EXAMINING BOARD SUPERVISION OF OPTOMETRY.

Pursuing the subject a little further, it seems now that the outcome of this agitation is destined to be that State medical examining boards will assume the function of examining those who desire to fit glasses without proper medical qualifications, as they do for legitimate licensure, which, while immensely superior as a practice to the existence of separate optometry laws, and optometry boards, unfortunately recognizes an artificial division of the practice of medicine, which is as illogical as that of midwifery, and which is causing and will doubtless in the future cause even more disaster, for the reason that it is a calling which may be widely and picturesquely advertised, and which combines the enticing element of commercialism with the would-be beautiful principle of a profession. We observe that *The Journal of the A. M. A.* suggests this solution of the problem, in the following words:

"Each of our States has a board for the examination and licensing of physicians. A bill extending the powers of the medical examining board, authorizing it to examine, either directly or through an appropriately constituted examining committee, those desiring to fit glasses, to issue to them a proper license to do so, and to prevent all unlicensed persons from preying on the public, would meet all the indications as far as public safety is concerned, and would avoid the evils and dangers of a separate board."

This is an eventuality the optometrists certainly do not desire. It is quite obvious why they do not desire it. In New York the optometrists persisted in their efforts to have a strict optometry laws passed, and now they are beginning to object strenuously to the standards that are about to be set. In Ohio the effort was to have the State University teach optometry, and now the standard is set so high that there are few who care to study the pseudo science at such a cost in time and

effort, when the practice of medicine can be studied with but little more trouble. The University evidently perceives that it has made a mistake in adding this illegitimate offspring of the honorable art of grinding glasses, to the curriculum as a science, and are thus striving either to work it into a science or wipe it off the books. Speaking of the dangers of optometrists overstepping the limits of the law under which they operate. *The Optical Journal and Review of Optometry* recently uttered the following warning:

"However, there is one present danger caused by those who go beyond the literal limitation fixed by optometry laws; they make firm the conviction of the doctors that the optometrists are practicing a minor branch of medicine, and from that to the next step is easy; the attempt for a one-board legislation, one board which will examine and control all those who practice medicine or any minor branch of medicine—a board appointed and controlled by physicians. This question is up in several of the States, and optometrists are facing a fight to prevent its legal enactment. In so doing, they should not forget the main chance of success in such anti-optometry legislation; the fact that some optometrists are overstepping strict optometry practice, and thus convincing physicians that their sphere of work is being invaded. Should they be able to convince the Legislatures, and the people back of the Legislatures, of the truth of their claims, the one-board idea is sure to succeed."

CHIROPRACTIC COLLEGE CHARTERED IN TEXAS.

A press dispatch quoted in the October JOURNAL (Page 348) makes the startling announcement that a chiropractic college has been chartered in this State, with headquarters and teaching force in San Antonio. The charter under which this institution presumes to operate was granted to Dr. J. M. Stone, a San Antonio chiropractor, in 1910. The course of study is said to embrace thirty-six subjects. Two and one-half years will be required to accomplish this much work, and the course will be given without a vacation period. The degree of Doctor of Chiropractic will be granted. This degree will be given under the sanction of the great State of Texas. Any chiropractic graduating in this institution, under the law, will be authorized to use the title "Doctor." This is an important point, in view of the fact that a New York court recently held that an optometrist was authorized to use this title, despite the fact that it was forbidden by law, because the degree had been given him by an institution authorized to confer it, and that the method of securing the degree could not be considered. In this particular instance, it is said that damages to the amount of $7,500 were awarded the optometrist, because of "malicious prosecution" by a medical examining board. The president of the Optometrical Society of the City of New York, commenting on this opinion, has the following to say (*The Optical Journal and Review of Optometry*).

"Does this case not settle the question as to the right to use the degree given by a chartered, incorporated institution? If these institutions are not qualified to give a proper degree, then they ought to be put out of business, and the citizens of the several States should be protected from them."

And still they hark on the usual prohibition in their bills, against the use of the title, "Dr." or "Doctor"!

A short while ago the Chiropractors Association of Pennsylvania, applied for a charter from the State and was refused, on the ground that practitioners of this particular cult had no legal status in Pennsylvania. The matter went through the courts, and in January, 1914, the Supreme Court of Pennsylvania, handed down a decision affirming the order of the common pleas court of Pittsburgh, from which appeal had been made. In 1912, Virginia passed a law forbidding the practice of this particular cult, and the constitutionality of the law was speedily put to the test. The Supreme Court of Appeals of Virginia declared the act constitutional, in February, 1914. In 1913, a chiropractic was successfully prosecuted in San Antonio, by the Bexar County Medical Society, for practicing medicine without a license, despite the fact that the defendant was represented by the then Lieutenant Governor of Wisconsin, who was, it is understood, leading attorney for the chiropractics in that State, and nationally. We do not have the data at hand, but we feel sure that this decision was sustained by the higher courts. In any instance, it would appear that the chiropractics have no legal status in this State, and that they are violating our medical practice act when they hold themselves out to treat the sick by any means whatsoever.

In other words, the State of Texas is authorizing an institution to teach an art, profession

or calling, the practice of which in this State is contrary to law. A question arises, whether the State is a party to a fraud, when an individual pays good money to this institution for a course of instruction (?) which leads only to a violation of law in this and many other states of the Union. It is true that at the time the charter under which the San Antonio chiropractic school is said to be operating was issued, the issue had not been tested in the courts; but it is likewise true that the medical practice act did not contemplate extending the right to practice medicine to any such cult, and under the law graduates of institutions with standards such as this could not possible come before the state board of medical examiners. It would seem that at least there is a question as to the validity of the charter so issued. It seems to us that any citizen who might be sufficiently interested to make the effort, might succeed in nullifying the charter of this institution, following proper procedure through the courts.

TEXAS CHIROPRACTICS ACTIVE.

Recently the Texas Chiropractic Association was organized in Dallas, it is said, by 18 chiropractors, and a formidable list of officers was elected. As usual in such cases, the newspapers have been quite ready to speak kindly of this organization, probably anticipating the advertising patronage that is eventually to accrue.

A four page circular bearing the title, *The Weekly Chiropractor* is from time to time quite freely circulated in this State, and seems to be the chief exponent of the advertising propaganda of this cult. It is printed in Davenport, Iowa, This publication is evidently sold to practitioners throughout the country at so much per copy per week, and doubtless there is a nice little profit accruing to somebody. This is a fit companion to the publication of the National League for Medical Freedom, although not quite as well edited. The extent of the misrepresentations appearing in this publication may be judged from a few quotations. The following is the leading editorial:

"Quite often someone discovers and introduces a new germ into the arena of human affairs to do battle with us. Recently the hoof-and-mouth disease was the scare, and that is the same thing which appeared about nine years ago under another name. Tomorrow, like as not, someone interested in drawing one step nearer to the goal of a National Department of Health, with a member of the President's Cabinet, will discover another dreadful microbe with eyes green and claws long enough to scare the people into more approval of the project.

"We fear the 'doctors' more than we fear the things they 'discover.' If they could have their way, and sit in the councils of our government, to the exclusion of our right of liberty in the choice of health methods, they would make life more miserable for us than do the harassing thoughts of the terrible dangers their science brings to light. But there is, however, no probability of a National Health Department under the control of any one school of medicine. It may be true that 'medicine doeth good,' and it is true that the people willingly take lots of it. But when it comes to the question of swabbing it down their throats by law they balk at the compulsion, and the Spirit of 1776 rises to spit it out and dare any set of men to try to rule contrary to the rights of people to do as they please in such matters."

Nothing could, of course, be more ridiculous, and such charges will have no effect on normal people. However, a large percentage of our citizenship is not entirely normal, and many of them are extremely prejudiced. Such writings as this are, for that reason, likely to do much harm.

In the face of the demonstrated value of serum therapy, properly applied, and the saving of thousands of children by diphtheria antitoxin alone, the following paragraph is almost criminal. It is headed, "BEWARE OF SERUM THERAPY":

"Think for a moment: This is an age of serums. Everybody is being pumped full of serum, regardless of disease. It is well known that all serums harden arteries and veins similar as is found in arteriosclerosis. The 'authorities' themselves contend this. Then imagine what condtition our children will be in—granting their hereditary theory —with arteries hardened. As operations are more popular than ever, and probably will be very popular in the next generation, imagine the hemorrhages that cannot be stopped because of hardened arteries, because of serums in the generations before. And then, legally, they do talk about eugenics—improvement of the offspring and the race."

Extracts from a speech by "A Colorado Senator," are also illumniating. The following is a sample:

"Health is co-ordination of Innate Impulses (life) through matter. Disease (not ease in inco-ordination. Inco-ordination is an effect.) For every effect within the body there is a cause. The Chiro-

practor knows where to find this cause, and, having found it, he knows how to adjust the cause. The cause adjusted, Innate restores health. *What more is necessary?* Others have probably named your disease many times and treated the disease as named, and you still have it.

"The Chiropractor *adjusts the cause and you get well. Which do you want, your disease named or health? The latter, of course. Then see the Chiropractor.*" (Italics quoted.—EDITOR.)

But what's the use? We will always have with us such fakers as these, until the credulous and abnormal are eliminated, or so reduced as to number that the majority may feel warranted in riding rough shod over their idiosyncrasies, and this is merely an example, somewhat comparative to the ill effects and great harm done at the present time by that pseudoscience and religion, "Christian Science." The remedy lies in popular education, and the medical profession should be up and doing.

THE PROBLEM OF PROPER ENDOWMENT FOR TEXAS HOSPITALS.

We wish to call attention to a communication found elsewhere in this issue, giving information concerning private donations to John Sealy Hospital of Galveston, and we take this opportunity to refer briefly to the hospital situation as a whole.

If we are correctly informed, there is not an endowed hospital in the State, with possibly one exception, notwithstanding we have five million people to look after. And there are but few instances in which private individuals have made substantial donations, and in these instances the entire amount donated has usually been consumed in buildings, leaving nothing for endowment. A number of institutions are owned by denominational or charitable organizations, and most of these are burdened with heavy indebtedness on which they have to pay interest, practically their only source of income being from private patients. In addition, there are a good many privately owned instiutions, similarly burdened. Many of these are well equipped and are doing excellent work, utilizing such knowleddge as is already known for the benefit of their patients, but owing to the struggle for existence they are utterly unable to prosecute any research calculated to add to our common fund of knowledge. In fact, very few of the medical profession and almost none of the laity, know anything of the heroic struggle that has been put forth by those connected with many of these institutions. Only those best managed come anywhere near being self supporting, the deficiency usually being made up by the sacrifice of fees on the part of the surgeons connected with the management.

It seems quite proper that the public should be advised concerning these matters, and those who are able to contribute should receive every encouragement towards establishing endowments for hospitals and sanitariums, in order that original research work may be done, and that the profession of this State may be able to better contribute to the progress of medical science, a thing it can hardly be expected to do very much of under present pinched financial conditions. The humantarian side of the problem alone warrants many times the present expenditure in the establishment and maintenance of hospitals, and the hospital is the proper training school for the medical profession. We should strive to induce hospital endowments and push hospital bond issues.

SYPHILIS AS A MODERN PROBLEM.

The American Medical Association has undertaken to place before the American public a small and compact volume bearing the above title. The object is to appeal to the intelligent portion of the laity of this country to render their aid in the prevention of syphilis. The text is from the pen of the gifted medical author and teacher, Prof. Wm. Allen Pusey, M. D., of the University of Illinois. It clearly states the case for the benefit of the laity, placing the matter within their easy reach, in such simple style as to be fairly expected to accomplish its end if the laity should be put in possession of it.

Syphilis, gonorrhoea, tuberculosis, cancer, lead poisoning and alcoholism, are fruitful sources of preventable human agony, and a degeneracy so profound as to appall. Medical and sanitary science, overwhelmed with centuries of defeat, had nearly despaired of the hopeless task, of presenting to the public in a convincing manner, at least, the subject of syphilis, until Buret in the latter end of the nineteenth century and Pusey but yesterday, stood forth and assayed to awaken the public to the universal menace of this disease, and pointed out the possibilities of preventive medi-

cine and sanitary science in its control. But the sham conventionalities, as always, are standing in the way of prophylaxis, and many will be scandalized, but coming as it does, from the American Medical Association, this effort to popularize definite and reliable knowledge of syphilis should have the prompt support of every thoughtful person in and out of the medical profession, and the sooner physicians place syphilis and gonorrhoea on the same level with other human affections, the better for their clientele and for society in general.

It is to be hoped that this little volume will receive widespread circulation. It will materially add to the success of the movement to redeem society from this loathsome curse. (See Book Notes, page 411, this number of the JOURNAL.)

THE JOURNAL OF LABORATORY AND CLINICAL MEDICINE.

The initial number of this publication is before us, and we are well pleased with it. The contents are of a high order, and the advertising pages are clean. The editorial staff is headed by Dr. Victor C. Vaughan of the University of Michigan, recently retiring president of the American Medical Association, which is sufficient commendation of the publication in question. Drs. Dennis E. Jackson of Washington University, St. Louis; Frederick P. Gay of the University of California, San Francisco; Hans Zinsser of Columbia University, New York; Paul G. Woolley of the University of Cincinnati, Cincinnati; J. J. MacLeod of Western Reserve University, Cleveland; Roy G. Pearce of the University of Illinois, Chicago, and Roger S. Morris of the University of Cincinnati, Cincinnati, constitute the balance of the editorial staff. The C. V. Mosby Company of St. Louis, are the publishers.

The title of this new publication is most attractive. We wonder whether it is possible for one publication to combine highly technical laboratory and research matter and practical clinical medicine, in one homogeneous number. We realize the absolute dependence of the one on the other, but must confess some apprehension as to the appreciation by the busy practitioner of the essentially technical discussions of research work and laboratory methods. There is, however, a broad field between these two extremes, which it appears no single publication at the present time attempts to cover exclusively. The laboratory worker should be well informed as to the manifestation of the diseases arising from the pathology he is taught to search out, and the clinician should be kept equally informed as to the progress of medical science, and particularly as to those laboratory procedures which will help him in his diagnosis and support him in his final decision as to treatment. It occurs to us that this object may be easily attained, but the discussion must be well within the range of understanding of the average physician in order to fulfill this function to the best advantage. Ultimately the entire profession will doubtless be so highly trained from a technical standpoint that no discussion will greatly overreach, and perhaps that is one of the ends that this most excellent publication designs to meet.

The following excerpts from the leading editorial of the first number will serve to give an insight into the purposes of the publishers:

"The Basic aim of this journal will be to bring discovery and its application closer together, to supply the research man with a strictly scientific organ through which he can report the results of his labors, and to suggest to the practitioner how he may use the latest discoveries. *The Journal* will be filled with original articles and editorial reviews. In the former we hope to present much of the best productive research done in this country. In the latter there will be a record of the advances in the physical, chemical, and biological sciences, so far as they have medical significance, made by experts. Contributions to the physiology, nutrition and life phases of man, discoveries in etiology, pathology and the development of disease processes, improved methods of diagnosis and treatment will be reported, and the endeavor will be to keep the practitioner close upon the heels of the discoverer. * * * We propose to review original work, especially that which will be of either intellectual or practical value to the practitioner. These reviews will be accompanied by comments, and possibly by criticism, from the reviewer. Abstracts of scientific contributions by those not well informed as to what others have done along the same line are of but little value. The editorial staff has been selected with the intention of having an expert present with proper estimate the results of the latest scientific investigations. Only those expertly trained can properly interpret work of this kind. * * *

"Our endeavor will not be limited to curative medicine, but will include much of the art of the prevention of disease."

Financially, the publication seems to be on a solid foundation, the initial number carrying twenty pages of clean advertising matter. We wish the publishers and editors success in this venture, on their own account and for the good of the profession.

ORIGINAL ARTICLES.

DRAINAGE OF THE PERITONEAL CAVITY.*

BY

W. W. GRANT, M. D.,

DENVER, COLORADO.

In the *Surgery, Gynecology and Obstetrics,* December, 1905, appeared, at the hands of Dr. J. L. Yates[1], then of the Augustana Hospital, Chicago, now of Milwaukee, the best scientific article on the local effects of peritoneal drainage that had appeared, probably, in any language. For this article Dr. Yates was awarded the Senn medal by the Surgical Section of the American Medical Association. His experiments, his clinical demonstrations and collaborations from distinguished men of this country and Europe, should give his conclusions the most respectful consideration of surgeons. Some personal experience in infections of the abdominal cavity, and a reasonable familiarity with the views of other surgeons, recently induced me to read again this excellent paper.

The author refers, among other items, to Peaslee introducing drainage per vaginam in 1854; to the introduction of rubber drainage tubes by Chassaignac in 1859, Keith in 1864, and Wells about the same time; Koeberlee glass tubes in 1867, and the great influence of Marion Sims, who, in 1870, instituted primary drainage in all cases as a *prophylactic* measure; the warning of Miculiz, in 1872, of the danger of dead spaces, and that ideal drainage of the peritoneal cavity was impossible, in view of which he condemned irrigation through tubes and substituted gauze for drainage; the use of aseptic drainage tubes by Penrose, who contended that they should not be excluded by adhesions, because *non irritant;* Lawson Tait, McGuire, Hughes, Fowler, Delber and others, who held the opinion that drainage of the peritoneal cavity could be maintained for from 22 to 70 hours, the former in his well known forceful way, saying "When in doubt, drain."

He says "Hegar and Kehrer introduced capillary drainage, and Morris the cigarette drain." He confirms the statement of Maguire and Coe that gauze will not drain pus, that the serous discharge is an exudate due to irritation by the drain and is diminished by encapsulation of the drain, and that the longer the drainage the more fibrous and durable the adhesions, therefore drainage should be discontinued as soon as possible. He says the amount of fluid is no evidence of the efficacy of drainage; that drainage and peritoneal absorption are distinct propositions; that peritoneal lavage at the time of operation has little effect upon the reaction of the peritoneum to drainage; disappearance of adhesions is mechanical due to motility of viscera; post-operative lavage can *delay* but not prevent the formation of adhesions; drainage in the presence of infection is deleterious to peritoneal resistance and should only be used to exclude more malign influences; postural methods are both futile and harmful unless destined to facilitate encapsulation, as far as drainage is concerned; peritoneal drainage must be local, unless something is to be gained by rendering an area extraperitoneal, or by making, from such an area, a safe path of least resistance leading outside the body; blood pressure is more important than posture in limiting diffusion; horizontal, lateral, or prone positions seem to give better results in many instances; the influence of gravity is felt only when the moving forces decrease, especially with the cessation of diaphragmatic respiration; no peritonitis subsides without some adhesions, which are usually insoluble after 72 hours; adhesions from infectious peritonitis are more evanescent than those from mechanical irritation. He would restrict diffusion and consequent absorption by generous doses of opium, to reinforce the diminished activity of the intestinal canal, and by the maintenance of that position of the body which will oppose the action of gravity to the direction of most disadvantageous extension. This is a vindication of the opium treatment of the late Alonzo Clark of New York, 40 years ago, although Clark did not understand the physiology and pathology of the disease as it is understood today. This is a fair synopsis of Yates' article. He maintains his views in more recent experiments and communications.

It is not usually safe to go to extremes in the practical solution of our difficult problems, either in pathology or surgery. We are impressed with the fact that all theories, experiments and laboratory findings, must stand or fall by the bedside test, or clinical experience. We realize that most cases of pus in the belly are not those of general septic peritonitis. We frequently see from a half to a pint of pus free in the lower peritoneal cavity, from a ruptured appendix, as well as from other sources of infection, 3 or 4 to 10 or 15 hours after rupture, and the peritonitis limited and without adhesions. Such cases have frequently been called general peritonitis, but with removal of the focus of infection, wiping out the pus and the use of the drainage tube for a day or two, and in delayed cases longer, perhaps, the patients get well. In general

*Read by invitation before the Section on Surgery, State Medical Association of Texas, Fort Worth, May 4, 1915.

1. Yates, J. L.: *Surg., Gynecol. and Obst.*, Dec., 1905.

peritonitis, twenty years ago, practically all died. At that time the reports of cures were made with an apology, or an appeal to the credulity of the profession, so exceptional were they. Yet in a few years many recoveries have been reported.

I believe it is established that drainage of the general peritoneal cavity is, in pathological states, absolutely impossible beyond 36 hours, or 72 at most, because of the rapid formation of adhesions and encapsulation, no matter what the drainage material, or posture, may be. In simple ascites it may be maintained longer than in septic peritonitis. It follows that whatever advantages there may be in posture should be secured at the *earliest possible* date; and there seems to be good reason for the Fowler position in these cases. Pus will go the way of least resistance. I believe it wise to use the force of gravity, the influence of respiration, the intra-abdominal pressure and the motility of the viscera, in order to concentrate the discharge in the most favorable direction, and to limit adhesions. The intra-abdominal pressure being greater than the atmospheric pressure, the Fowler position promotes, in my opinion, these ends. There are other considerations involved, chiefly the delimitation of infection and effusion, consequently pockets of pus, so frequently observed in peritonitis, would be less common, especially when lavage of the general peritoneal cavity, with warm salt solution, is freely used at the primary operation; and better if two or more openings are made in the pouches of the abdomen. Common experience, and experiments as well, teach that gauze will not drain *pus* and when saturation occurs, which is in a few hours, it becomes a mucous plug and a medium of infection; capillary drainage is impossible in such conditions. The drainage tube, when retained too long, also introduces and retains infection, and yet it is the most suitable instrument for draining a cavity. Both, in a short time, drain only the *immediately* surrounding tissues.

In localized peritonitis and encapsulated abscess, the danger is less and the proposition much more simple, and yet, in these cases, the irritation and infection of the tube frequently prolongs the healing and the closure of the wound. In gangrenous appendicitis, without pus, a cigarette drain for 24 or 36 hours will often save the necessity of reopening the wound. Nonvirulent pus in limited quantity, may be cared for by leucocytes.

Even if adhesions are conservative, as claimed, all admit that ultimately they are a distinct menace to the welfare and life of a patient. Therefore, one is gratified when he feels that they are limited, and of brief duration. It is advisable, therefore, as soon as possible after the acute stage is past, to promote the motility of the viscera, as this is probably the chief element in the dissolution of recent adhesions.

In my experience recovery is not due to any one thing, though drainage is the most essential. Among the chief accessories I may mention, a quick operation, the Fowler position, free abdominal lavage at the primary operation, and rest. As drainage of the general cavity must be for a brief period only, owing to prompt adhesions and quick encapsulation, it follows that it should be thorough and complete from the first. These measures, with the intra-abdominal pressure, powerfully promote the rapid evacuation of the pus, prevents pus pockets, and concentrates the discharges in the most dependent position. I have the greatest respect for the physiological experiments and clinical deductions of Yates, and cordially endorse most of his conclusions, but I believe the Fowler position useful and valuable in the early period, in opposing gravity and intra-abdominal pressure to the accumulation of pus, and to the upward extension of the infection. I believe the flushing useful in cleaning the abdominal cavity, thus limiting adhesions. I do not believe the trauma or the shock ascribed to flushing, sufficiently grave to justify its non-use. With general extravasation and free opening for drainage, I have not hesitated to use it, and while a few cases may prove little, I believe the measure worthy of judicious consideration, and use. General septic peritonitis is not so common as a few years ago.

In recent experimental work by Dandy and Rountree[2] of Baltimore, on peritoneal and pleural resorption in their relation to treatment by postures, recently published, the experiments of Yates are, in the main, confirmed. I present some of their conclusions:

1. There is a very active resorption from all parts of the thoraic and peritoneal cavities.
2. This absorption takes place principally by way of the blood, and not the lymph channels.
3. Resorption from the peritoneal cavity is approximately the same in all positions, except the pelvic posture, where it is 15 per cent lower (which holds good in pleural resorption).
6. The visceral peritoneum plays a great role in resorption from the peritoneal cavity.
7. There is no basis for the belief in an intra-peritoneal current toward the diaphragm.
9. Regarding absorption of toxic material, there is more to fear from the diaphragm than from any other part of the abdominal cavity, except the pelvic cavity.
10. Gravity has a decided bearing on the localization of fluids, more slowly observed in abdomen than in the chest.
13. As emphasized by Yates, rest of intestines is of great importance for combating diffusion.
14. While the original Fowler position was based on erroneous, and now refuted, premises, we have

2. Dandy & Rountree: *Beitrage zur Klein Chir.*, 1913. (Later, *Johns Hopkins Bulletin.*)

sufficient proof of a different nature to favor this posture in the treatment of acute diffuse peritonitis.

It is especially gratifying to note the conclusions of these authors, especially in relation to gravity and posture.

Petroff[3] concludes that gauze loses its hygroscopic properties in from 6 to 12 hours; that hygroscopic properties of gauze is just as apparent in the infected as in the aseptic abdominal cavity; that rubber tubes were preferable to gauze and that glass drainage tubes excite less irritation and adhesions than rubber or gauze, and that drainage of the free peritoneal cavity is possible, at least in the first 48 hours, and that glass drains are the best material.

Saxon Pope[4] of San Francisco, in a paper on the use of citrate of soda solutions in the prevention of peritoneal adhesions, concludes, from experiments on animals, that in the normal peritoneal cavity there is no active thrombin element, but that in the exposed or traumatized cavity the thrombin ferment is activated (thrombokinase), and that the presence of calcium salt is necessary to its activity, while the sodium salt inhibits the formation of thrombin and plastic exudates.

The practical conclusion is that the addition of one or two per cent of citrate of soda solution to normal salt solution and flushing the cavity, tends to prevent post-operative adhesions. In the absence of any marked favor in the use of sterile oil and other mechanical applications for the prevention of adhesions, the above considerations are well worthy of trial in abdominal infections.

Pibram[5] from experiments on animals, found that the injection of the vitreous contents of calves' eyes into the peritoneal cavity prevented adhesions. On opening the abdomen two to three weeks later, only insignificant adhesions around the foreign body left in the abdomen, were found, and when no foreign body was inserted in the abdomen, no adhesions occurred.

Roger Lee[6] of Boston, in an elaborate experimental study on the coagulation of normal human blood, gives much space to the influence of thrombin as an important agent, or substance, in the coagulation of the blood, called by Schmidt and others, a fibrin ferment. By Lee and others, thrombin is not a ferment, though its relation to the blood platelets and to coagulation is admitted. It is present in fresh blood serum as a necessary coagulating element of the blood.

Experimental investigations demonstrate that the presence of calcium salts is necessary to the formation of thrombin, and that barium, the chloride and citrate of sodium, will prevent its formation. Practically these investigations demonstrate that there can be no scientific solution of the problem of drainage of the peritoneal cavity without full consideration of the physiology of the abdominal peritoneum and the influence of thrombin on coagulation and the deposit of lymph, and consequently its effect upon adhesions. As in a short time, adhesions are permanent and harmful, it is of the utmost importance to prevent them, and when not entirely preventable, to limit them and to cause their early solution by the application of every known physiological fact and principle of surgical pathology.

Since the foregoing was written two very interesting articles are published in *Annals of Surgery*, March, 1915, on *The Prevention of Post-Operative Adhesions in the Peritoneal Cavity* and *Lymphatic Drainage of the Peritoneal Sac.* Sweet, Cheney and Wilson[7] of Philadelphia, after extensive experiments on animals, state that all oils used in the peritoneal cavity cause intense exudation of leucocytes, an excessive amount of fluid in the cavity increases adhesions and interferes with the normal healing of the wound, and that omental and mesenteric tissues were more successful in preventing adhesions than any other material. Their experiments with citrate of soda solutions, in salt solution, as advocated by Sexton Pope, were unfavorable but not conclusive, because in their experiments on animals the intestines were opened and this avenue of infection might have caused the unfavorable impressions from its use. They admit that it might be different in cases not so infected.

They conclude that the only way to limit adhesions is to limit the incision—the trauma. From these experiments we may conclude that needless incisions, or incisions longer than necessary to do good work, are to be discouraged.

W. C. Woolsey[8], concludes that stomata of the diaphragm of von Recklinghausen are devoid of evidence to support it, confirming the negative evidence of MacCallum, of Johns Hopkins.

The existence of a prompt lymphatic absorption from the entire peritoneal sac by lymphatic vessels to the diaphragm and the substernal lymph nodes, is claimed, confirming the investigations and conclusions of Muscatello, Buxton and Torrey. This is in conflict

3. Petroff: *Surg., Gynecol. and Obst.*, Dec., 1913, p. 682.

4. Pope, Saxon: Transactions California State Medical Society, 1914.

5. Pibram: *Arch. Surg.*, Berlin, Aug. 22, 1914, p. 398.

6. Lee, Roger: *Arch. Int. Med.*, 1914, p. 11.

7. Sweet, Cheney & Wilson: *Annals of Surg.*, March, 1915, p. 297.

8. Woolsey, W. C.: *Annals of Surg.*, March, 1915, p. 291.

with the experimental investigations and conclusions of Dandy and Rountree, previously mentioned, in favor of a haemotogenous instead of lymphatic absorption. The former does not deny that there may be coincident haemotogenous absorption, and that the tissues of the diaphragm do take an active part in peritoneal absorption. Endorses Fowler position as having definite pathological foundation.

As germane to the subject of this paper, I may be permitted to refer to an interesting article in the April number of *Surgery, Gynecology and Obstetrics,* by Crile[9], on the treatment of peritonitis by what he terms the kinetic theory or principle. Profiting by nature's conservative agencies in resisting disease by phagocytosis, and in peritonitis by absolute rest and paralysis of all parts involved, he would aid the natural efforts of conservation by the free use of opiates, and supply the watery waste of tissues, due chiefly to vomiting, by the drop saline method per rectum. In the use of opium to produce intestinal and systemic quiet, it is to be observed that he, also, alludes to the practice of Prof. Alonzo Clark in treating peritonitis with large doses of opium. It is certainly suggestive, and a matter of more than ordinary interest, to witness a revival by Yates and Crile, even partially, of the teaching of fifty years ago, as to the treatment of peritonitis, though obviously from different premises.

The opium treatment is so diametrically opposed to the present prevalent practice immediately preceding and following operation, both as to diagnosis and treatment, that we are certain to witness renewed interest and activity in the subject. This is assured by the high character of the authors.

There is no such thing as primary idiopathic peritonitis. It is always infectious, and usually secondary to disease of the abdominal viscera.

Assuming that the kinetic theory is supported as nature's defensive weapon and shield in conserving its forces and energies, what is the duty of the surgeon in the premises? I believe each case and condition must receive discriminating consideration—depending on the cause and parts involved. The use of opium is not intended to contra-indicate operation in the conditions usually productive of septic peritonitis, such as a gangrenous appendix, perforation of the gallbladder, stomach and duodenal ulcers or hemorrhagic pancreatitis, etc. Under these conditions the use of deep morphinization and salt solution should only be regarded as aids to surgical intervention in conserving histologic change and energy.

9. Crile: *Surg., Gynecol. and Obst.*, April, 1915.

I think it is a safe prediction, which may be viewed in the nature of a warning, that we are likely to witness the same abuse from the indiscriminate and unscientific use of opium in the treatment of peritonitis that resulted from the similar application of the so-called Ochsner treatment of appendicitis.

SUMMARY.

(1) In the consideration of the question of peritoneal drainage, I believe it settled that drainage of the general cavity is necessarily limited to two or three days, at most, on account of adhesive encapsulation. Gauze is ineffective, dirty and dangerous, and should not be used for drainage.

(2) Of all drainage material, glass tubes are the cleanest and best, though rubber tubes are in most general use. The Fowler position is to be commended, though not to the exclusion of the prone or semi-prone position. Two or more openings in the positions favored by gravity is often advantageous for drainage.

(3) Irrigation at the primary operation, with normal salt solution and the addition of 2 per cent of citrate of soda, is beneficial when there is extravasation of pus in the general cavity. A stab wound and a drainage tube is bad surgery, except when the patient is too weak to be safely given an anesthetic or to permit an anesthetic. A slow, tedious convalescence, if not death, is the inevitable result of not removing the focus of infection at the primary operation.

ABSTRACT OF DISCUSSION.

Dr. J. E. Thompson of Galveston, said: The paper is an extremely good one, because it is an excellent resumé of our knowledge concerning peritoneal drainage. It was the experience of surgeons many years ago, when draining the peritoneal cavity with glass tubes, that after the first twenty-four hours, very little fluid accumulated in the bottom of the tube, and after forty-eight hours the tube was perfectly dry. This proved positively that the tract did not communicate with the peritoneal cavity at all, but that adhesions had occurred roundabout it, which shut off its lumen completely. The same experience attends drainage with rubber tubes and glass tubes. We have all been struck with the absence of any discharge after the first twenty-four hours. Of course, I am not referring to the drainage of pockets of pus. In these cases, drainage will continue for a long period.

Drainage of the peritoneal cavity with cigarette drains shows the same phenomenon. If the drains are placed between the loops of intestine, they will be absolutely dry after twenty-four hours. If the drains are passed into a pus pocket, a certain amount of fluid will pass along them. Under these circumstances, it seems ridiculous to talk about "draining the peritoneal cavity." Only a very limited area can be drained under any circumstances, and I think that the thoughtful members of the profession never expect to accomplish anything more. I do not believe that the thoughtful surgeon, when he puts his patient in the Fowler position and passes a tube into Douglas' pouch,

dreams for one moment that fluid will gravitate from the upper parts of the abdomen and drain into the tube for days. All he hopes for is to drain away fluid that would, under ordinary circumstances, collect in the most dependent part of the belly and serve as a nidus for the growth of microorganisms that are already present there, and to avert the possible formation of a localized abscess cavity, which will need attention at a later date.

Following up this line of argument, drainage is usually confined to dependent places, and the average surgeon in a case of peritonitis in the lower half of the abdomen places drains in three places only: namely, one in the pelvis, and one in each flank on the outer side of the colon. As a rule these are quite sufficient and when they have served their purpose, which usually occurs at the end of forty-eight hours, they can be removed with absolute safety. The amount of albuminous material left behind is very small, and often though it be infected, it is usually well taken care of by the peritoneum that surrounds it.

We always recognize that drainage of the whole peritoneal surface that covers the small intestine, the mesentery and body wall is an absolute impossibility. We never attempt it. All we attempt to do is to try to get the fluid accumulation to gravitate to the most dependent parts, and the only way we have of accomplishing this is to place the patient in the Fowler position. In a large number of instances, I believe that this fluid gravitates in the pelvis in a very short time, certainly within a few hours, and tube that is placed in Douglas' pouch is the means of removing this fluid. That fluid will gravitate in a manner is seen daily during the course of abdominal operations on the pelvis. It is no uncommon thing for extravasation of blood and serum and fluid from ovarian cysts to soak the sponges that serve as dams to hold back the intestines. A certain amount of this fluid passes between the intestinal loops. When the operation is completed, this fluid can be seen trickling downwards into the pelvis, and if a sponge is placed in this situation and allowed to remain there a few minutes, it will soak up all this discharge.

When the patient is put in the Fowler position the greater part of this fluid will drain downwards. I believe that the main value of a drainage tube in Douglas' pouch is to remove this albuminous material or prevent it as serving for a cultivating medium for any infective agent. The question as to the best material to employ for drainage has not yet been settled. Cigarette drains and gauze tampons have very many serious disadvantages. That they serve a useful purpose in certain circumstances, cannot be denied, but in a large number of cases it is very much better to remove them at the end of forty-eight hours. I believe that if they are employed at all, they ought to be placed in such a manner that they can be removed easily and without danger. One must not forget that gauze is one of the worst means of draining pus. It is merely a capillary drain, and is unable to drain away in a satisfactory manner albuminous materials. Personally, I place the greatest faith on rubber tubing. If it is carefully placed and carefully chosen, I do not believe it is likely to do harm. I have never seen necrosis of the intestines result from pressure. I believe, when the accident has happened, that tubing of too stiff a nature has been used, and it has been placed in a very improper manner. Often two tubes can be placed side by side in such a manner as to enable us to flush out the cavity in which they are placed, and when attempting to drain this cavity, I believe it is better to use tubes fixed in this manner; one tube, the larger, should have large holes cut in its side. This should be the exit tube. The smaller tube should have no side openings at all. These tubes should be stitched together carefully and placed in the abscess cavity. At a suitable time, the abscess cavity can be irrigated through these tubes without the slightest danger.

INTESTINAL PARESIS WITH SPECIAL REFERENCE TO POST-OPERATIVE COMPLICATIONS.*

BY

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Intestinal paresis is common to many diseases. It varies greatly in degree and in diagnostic and prognostic significance. Its etiology is as variable as its significance. "It is essentially a perverted function of the intestine, prominently characterized by loss of tone of the intestinal musculature, of variable extent, and by extreme gaseous distention of the paralytic gut, following actual obstruction, circulatory failure, or toxemia; wherein there is defect of drainage per anum but maintenance of the excretory function of the liver and of the intestinal mucosa; wherein the content of the intestinal lumen becomes extremely toxic by reason of defective drainage and consequent putrefaction; wherein the oral rather than the aboral end of the alimentary tract acts inadequately as the excretory vent; wherein absorption of virulently toxic material from the intestinal lumen and the prevalence of a paralytic intra-intestinal gas pressure tend to perpetuate the stasis, and, if the condition be not ameliorated, to kill[1]." It is not my intention to consider those states of chronic intestinal stasis dependent primarily upon congenital or acquired anatomical functional and aberrations, of late years so popularized by Mr. Lane and others, but to discuss rather the more or less acute conditions resulting from a more or less sudden interference with the normal intestinal flow. In other words, our theme leads us into a brief review of the circumstances under which intestinal obstruction, or ileus, is brought about and the train of phenomena resulting. One of the best working classifications, because clinically so practical, is that of John B. Murphy[2]. He divides the causes of obstruction into three main classes, which for the sake of brevity I shall condense into two: (1) Mechanical and (2) Dynamic.

The mechanical may be divided into the obturation and the strangulation forms. In

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1. King, Elmer H.: *N. Y. Medical Record*, Jan. 30, 1915, p. 180.

2. Murphy, Jno. B.: Clinics, August, 1914, p. 621.

obturation obstruction the intestinal current is blocked but the circulation still passes more or less freely around the obstruction, whereas in strangulation there is more or less complete circular constriction of the gut and the circulation is progressively interfered with and finally cut off, so that gangrene supervenes.

The dynamic forms may be divided into two, the spastic and the paralytic. Under spastic are to be included practically two varieties, those due to lead poisoning and those due to tyrotoxicon. In these forms there is first violent contraction, followed by extreme dilatation, especially in that form due to tyrotoxicon, as seen in milk and ice cream poisoning. Murphy mentions the case of a young physician of Chicago, who died from this form of poisoning, "the prominent symptom of which was a complete absence of peristalsis, like that of an intestinal obstruction[3]." In the paralytic or adynamic forms, as Murphy prefers to call them, we find many etiologic varieties, but all characterized by loss of muscular tone and marked by more or less complete absence of peristalsis. We all readily recognize the damage done by mechanical obstruction, but we have not given due consideration to those varieties that are initiated independently of any such mechanical cause. Murphy classifies them as follows:

1. Adynamic (absence of peristalsis).
2. Operations on the mesentery.
3. Prolonged strangulation.
4. Spinal cord lesions.
5. Afferent nerve lesions.
6. Reflex:
   (a) Strangulated omentum.
   (b) Hepatic calculus.
   (c) Renal calculus.
   (d) Ovarian compression.
   (e) Pleuritic diaphragmatic following pneumonia.
7. Septic:
   (a) Local peritonitis.
   (b) General peritonitis.
   (c) Embolism.
   (d) Thrombosis.
8. Uremia.
9. Drugs (prolonged use).

Time forbids that I should go into a discussion of the varieties. They must early be differentiated from the mechanical form, for a mechanical obstruction must be relieved promptly or death will ensue, whereas a paralytic ileus is often amenable to medical treatment if recognized in time. It is important, however, to call attention to those forms which are septic in origin, for these may often be prevented by timely operation for acute appendicitis or other septic abdominal condition. The same may be said of many of the reflex cases, such as strangulated omentum, twisted ovarian pedicle and the various conditions acting from a distance, such as hepatic or renal calculus or pancreatic disease. Diaphragmatic pleurisy following pneumonia "is one of the rocks on which," as Murphy has well said, "many abdominal diagnoses are wrecked," and is mentioned because sometimes with its painful abdominal distention it so closely simulates intestinal obstruction. We shall, however, return to this question of differentiation a little later.

McGlannan[4] has, I think, simplified the study of intestinal obstruction by dividing it into three stages, without regard to etiology, as follows:

1. The stage of onset, when the symptoms are due to an arrest of the intestinal current.
2. The stage of compensation, when the gastro-intestinal organs attempt to overcome the obstruction or its results.
3. The stage of sequelae or complications, when the obstruction has caused secondary obstructive changes in the bowel or in the body as an entirety. "The higher and more complete the obstruction the less clearly defined will be the symptoms of the different stages." Benjamin F. Davis[5] has well described the development of symptoms as follows:

"The segment of bowel, immediately cephalad to the obstruction is thrown into violent peristaltic contraction, increasing intraintestinal pressure tremendously and squeezing most of the blood out of the intestinal capillaries. The peristaltic contractions increase in number and duration, in some cases developing into a tonic spasm of entire loops. Gradually absorption of the intestinal musculature thus devascularized makes its appearance and the bowel slowly yields to the pressure of the contained secretions and gas, finally ballooning out to form in the earlier stages the areas of regional distention (known clinically as Wahl's sign), and later the general tympanitis of ileus. As the increased intraintestinal pressure from muscular contraction closed the intramural capillaries of the bowel in the first instance, so the pressure of the intestinal contents and the stretching and flattening of the capillaries in the distended portion tend to maintain that closure in the second. Thrombosis from stagnation is one of the results. * * * From the standpoint of pathological anatomy it is recognized that intestinal distention may lead to anemia of the bowel wall with stasis and thrombosis in the mesenteric blood vessels, leading occasionally to necrosis of the mucosa with the formation of so-called dilatation ulcers. * * * Intestinal distention, venous stasis, thrombosis, hemorrhage, necrosis, ulceration.

"The evidence serves to emphasize the necessity of early operative interference in intestinal obstruction, of operation before extensive vascular changes have been induced. It suggests a reason why relief of the obstruction and drainage of the bowel even in the absence of infection fail to save a considerable portion of patients—those in whom thrombosis in the capillaries of the bowel and in the mesenteric veins prevents the efficient reestablishment of the circulation upon the removal of the intraintestinal pressure. It also suggests caution against the too sudden relief of this pressure because of the danger, first, of embolism; second, of

3. Murphy, Jno. B.: Clinics, August, 1914, p. 630.

4. McGlannan: *The Journal A. M. A.*, 1913, LX, 733.

5. Davis, Benj. F.: *Annals of Surgery*, March, 1915, p. 265.

acute explosive hemorrhagic infarction of portions of bowel in which the vascular apparatus must be able to accommodate a gradual return of the blood, but would be overwhelmed by its sudden influx, and third, of serious hemorrhage into the intestinal lumen from rupture of the mucosa over areas of explosive infarction."

Thus, it appears that intestinal obstruction has a consistent pathology and that the varieties differentiate themselves clinically by virtue of the violence or the completeness of action of their respective causes. At least one underlying cause is fundamental in the pathology of all these obstructions—toxemia. The special purpose of this paper is to emphasize the factor of toxemia, in ileus, which at last is the determining cause of death in all forms of intestinal stasis which kill. It may be profitable, therefore, to refer to some of the recent theories advanced to explain the cause of death from obstruction.

Much experimental work has been done in this field of investigation and it is especially gratifying to us Americans to note that the most important work has been done since 1910, in the laboratories of this country.

Chief among these are the following: Whipple, Stone and Bernheim[6]; Hartwell, Hoguet and Beekman[7]; Fred T. Murphy and Beth Vincent[8]; Murphy and Brooks[9]; D. M. Davis[10]; J. Shelton Horsley[11]; Fraser B. Gurd[12], and J. W. Draper[13]. Much of value has come out of these researches and surgeons have derived from them most profitable suggestions for treatment. These investigators have practically agreed that the cause of death is a toxemia resulting from the absorption of a toxin elaborated in and absorbed from the intestinal lumen into the blood. That it is not a bacteriemia seems now settled, but how the toxin is formed is yet a mooted question. Whipple, Stone and Bernheim believe it originates in the intact mucosa itself, owing to some perversion, the fundamental nature of which is unknown. Fred Murphy and his collaborators admit the toxin, but believe it the product of bacterial growth in the stagnating contents of the obstructed bowel; that it is not specific for any part of the intestinal canal and may be found in the gall bladder; that in the production of symptoms the factors which make absorption possible are more important than those which produce the toxin, and that interference with the circulation of the obstructed intestine is an essential factor in allowing this abnormal absorption. They believe distention of the bowel is largely responsible for this circulatory disturbance. Hartwell and Hoguet take issue with the conclusions of Whipple, Stone and Bernheim and try to show two things:

(1) That the response to the irritation set up in the bowel by the retained secretion is a tremendous drain of fluid from the blood into the lumen and that life may be maintained almost indefinitely by supplying this water to the blood.

(2) That the absorption of poisonous material and the development of true ileus symptoms takes place only when the mucosa has been damaged, the damage being the result of over-distention, assisted possibly by the digestive ferments. This damage permits bacterial invasion of the bowel wall and a death of tissue cells.

Gurd produced similar phenomena by bringing about venous obstruction by ligature of the portal vein and concludes that the toxin is the result of autolysis of tissue in the mucosa of the wall, in this partly agreeing with Murphy and Vincent as to the effect of venous stasis, and with Hartwell and Hoguet as to the elaboration of the toxin.

A study of these investigations convinces one that a toxin is formed in the intestine and is the cause sooner or later of death if its absorption is not prevented or stopped. They have further shown that obstruction with strangulation is more rapidly fatal than a simple stasis; it is rather a question of degree than of difference of pathology, since even a simple obstruction, if unrelieved, develops strangulation from a progressive distention.

Distention, then, is an important factor in the development of the successive stages as seen in McGlannan's classification. It is the early and warning sign of danger and urges prompt diagnosis and relief.

It is of the greatest importance to differentiate between the mechanical and the paralytic forms of ileus, for the means of relief are somewhat different. The time and the place forbid that I should undertake an elaborate differentiation.

The circumstances under which distention develops are important and will often indicate not only the character but the location of the obstruction. Thus will be recognized the obstructive hernias, intussusceptions, internal strangulations and volvulus. A mesenteric thrombosis will be suspected in a case of valvular heart disease, where the signs of obstruction come on with sudden increase of heart action without marked rise of temperature.

6. Whipple, Stone, and Bernheim: *Journal Experimental Medicine*, 1913, XVII—286 and 307; *Annals of Surgery*, 1914, LIX, 714.
7. *Archives of Internal Medicine*, Vol. 13, No. 5, May 15, 1914, p. 701 to 736.
8. Trans. Surgical Section, A. M. A., 1911, p. 313.
9. Trans. Surg. Section, A. M. A., 1914, p. 145.
10. *Bulletin Johns Hopkins Hospital*, 1914, XXV, 33.
11. *Journal A. M. A.*, 1911, LVII, 1338.
12. Trans. Southern Surg. and Gyn. Assn., Vol. XXV, 1912.
13. *Journal Infectious Diseases*, 1914, XV. 124.

There is usually no rise of temperature in the early stages of mechanical obstruction; this and a high leucocyte count come on later, especially with the development of strangulation. The septic forms of obstruction are of importance, especially because timely interference will often prevent them and little can be done after the peritoneal surface has been extensively involved in infection.

Here the post-operative forms of obstruction especially demand our attention.

Post-operative forms of obstruction may be mechanical or paralytic. It has been estimated[14] that seventy-eight per cent of cases of post-operative ileus are due to adhesions. In a recent report by Deaver and Ross[15], of 276 consecutive cases of acute obstruction admitted to German Hospital, Philadelphia, in ten years, 81 cases were due to post-operative adhesions; of these, 51 followed operations for appendicitis, of which 44 had been drained. They correctly hold each drainage case as one "in which operation was delayed beyond the time of election." Seventeen cases were due to adhesions, the primary operation not being given and fourteen followed hysterectomies, salpingo-oöphorectomies and the like. Two post-operative obstructions were due to adynamic ileus, not explained. Such cases, when not septic, are most likely due to mesenteric thrombosis. A few cases follow extra-peritoneal operations, such as nephrectomies, and are usually cases of paralytic ileus, or pseudo-ileus, as Olshausen called them. Even these are, however, occasionally fatal, owing probably to the depressed condition of the patient, aggravated by the intestinal toxemia, but sometimes owing to mesenteric thrombosis resulting from venous obstruction caused by the extreme intestinal distention.

The treatment of intestinal obstruction will depend largely upon our ability to recognize the cause and the seat of the obstruction. The subject is too vast to attempt here anything like an adequate discussion. It is, however, of the utmost importance that we put ourselves as surgeons into the correct attitude towards acute abdominal conditions. The profession, as a rule, now considers appendicitis and cholecystitis surgical affections, and the number of surgeons who believe penetrating gunshot wounds of the abdomen require exploration, is much greater than formerly, but is not the large mortality from ileus still chiefly due to the effort to relieve by enemas and other means, whereby the pathologic process is allowed to progress towards disaster? The truth of the matter is, as McGlannan has pointed out[16], that "whenever a patient suffering from abdominal pain alone, or pain with either vomiting or constipation, or both, is not permanently relieved by lavage or effectual enemas, immediate operation is indicated." This should be adopted as a surgical rule and no purgative should be given in such a condition until enemas have been effective, when, indeed, the purgative will not be necessary." Take also the instance of strangulated hernia; until we realize that instruction in methods of taxis is wrong and that every hernia not reduced by the most gentle manipulation is one in which operation is indicated, we shall subject our patients to the dangers of intestinal gangrene, mesenteric thrombosis or fatal toxemia consequent upon our procrastination. That surgery of ileus is best which is timely, and operative intervention is demanded in every case where the response to such measures as gastric lavage and properly administered enemata is not prompt.

Let me briefly sum up the principles of treatment. Ileus occurs spontaneously or as the result of operation. In either case the indication is to relieve the cause, and do it promptly when the condition of the sufferer permits. I shall not enter upon a discussion of the various procedures required for the particular case, but I do wish to emphasize the importance of stopping the toxic absorption which goes on more or less in every case of acute intestinal stasis. The cause of the obstruction may be removed and yet the patient die of profound toxic absorption. I believe the mistake is too often made by the surgeon of contenting himself with the relief of the obstruction, forgetting that the distended intestine in the later stages of an obstruction contains a virulent poison, which must be removed. Moreover the distention must be relieved by emptying this fluid, as the paralyzed segment is often incapable of passing the contents on and remains as an obstruction, notwithstanding the removal of the mechanical barrier. This is important, too, since Kocher has shown[17] that in rabbits absorption from the intestine blown up with air is very much more rapid than in the normal state. Whether, as Abbe tried some years ago to show, the intestine below the obstruction is "starved" and ready to take up the material poured down through the relieved obstruction, thus giving rise to a rapidly fatal toxemia, is true or not, there can now be no doubt that, in operating upon any intestinal obstruction the distended coil must be emptied, in addition to relieving the obstruction. The important thing, as McGlannan says, is to relieve the obstruction in the first stage and the toxemia in the later stages. Treves[18] said, long ago (1884), that "any operation performed should give im-

14. Bryant's System of Surgery, Vol. VII, p. 726.
15. Annals of Surgery, Feb., 1915, p. 201.
16. *Journal A. M. A.*, March 8, 1913, p. 733.
17. Wilms, Ileus, Deutsche Chirugie, 1906, p. 46.
18. Intestinal Obstruction, 1884.

mediate and entire relief to the distended bowel above the site of occlusion" and in his System of Surgery[19] (1896), he remarks: "The mortality of the operation for acute intestinal obstruction is very high, possibly 75 per cent. But it is becoming lower, and will no doubt be materially reduced when operations are performed earlier and are not considered complete until the bowel has been emptied." He later stated that the mortality had been reduced fifty per cent by relieving the distended bowel above the obstruction[20].

Greig Smith urged many years ago, that a distended bowel should not be returned to the abdominal cavity. This emptying may be done by aspiration (Greig Smith), by simple incision, by establishment of artificial anus with the Paul or Mixter tube, by Stewart's method of utilizing a half Murphy button with a tube fitted into it, or by enterostomy. The essential thing is to empty and the expedient of Monks (appropriated later by Moynihan), of milking the intestine over a specially devised tube may be necessary in conditions of complete paralysis of a segment of bowel. In some cases the condition of the patient will permit no search for the obstruction. In such cases a simple enterostomy may be the only thing that can be done. I have found the umbrella or de Pezzer catheter, extremely safe and convenient, as it can be put in under local analgesia without suture of the bowel to the wall. The cause may be sought later, but stress is laid here on the necessity of relieving the toxemia in the most effectual way that can be safely done. Relief of toxemia, however, demands something more. In these cases, as shown by the experiments of Hartwell and Hoguet, there is early excessive secretion into the intestine above the obstruction and into the acutely dilated stomach. Gastric lavage, repeated as often as may be necessary, by removing this fluid not only takes away an enormous amount of toxin but relieves the dilatation and permits the gastro-intestinal wall to recover its tone. The method of Kappis[21] of passing the stomach tube through the nostril and allowing it to remain *not over 12 hours,* does not appeal to me, as I think the object can be obtained much less cruelly by repeated use of the tube when necessary. Vomiting stops and general improvement is immediate. The loss of fluid must likewise be replaced by hypodermotoclysis and the Murphy drip, and if urgency demands it, by intravenous infusion. I have been for some time using glucose solution, 5 per cent without salt, as Trout[22] has shown the large amounts of saline absorbed by Murphy drip to be injurious in certain cases with renal involvement. Pituitrin, combined or not with eserine[23], has given me excellent service in cases where there is simple intestinal paresis without mechanical obstruction. I have for some time employed it almost as a routine procedure, after all operations for septic conditions. Elmer H. King[24] has reported a series of cases where he has given it with remarkable effect intravenously. The effect on the bowels is almost miraculous, but caution is necessary in cases of organic heart or vascular disease. I have given up the use of eserine salicylate, suggested by Craig[25], since I began the use pituitrin. I have had no experience with the faradic current, so lauded by E. O. Kane[26]. Lederer[27] reports ten cases of grave paralytic ileus immediately relieved by doses of atropin ranging from 1/60 grain up to 1/20 and 1/12 grain. Should such measures fail then resort must at once be had to enterotomy or enterostomy. In some dozen cases my friends and I have undoubtedly saved life in this way.

In conclusion, I wish only to refer to the best means of preventing post-operative ileus. The utmost gentleness must be exercised in our operative work, and although many do not agree with Crile in all he says about Anoci Association, still we must admit that he has done a vast amount of good by his teachings. I am sure the addition to strict aseptic technic of local anesthesia with novocain and adrenalin with quinine and urea, has done much in my hands to mitigate shock and prevent post-operative pain and distentions. Further, unnecessary use of retractors and sponging, with gentleness in manipulation, made easier by adequate incision, the avoidance of gauze drains unprotected by rubber, the careful covering of all raw surfaces within the peritoneal cavity and the use of water freely by hypodermatoclysis or rectal drip, will do much to do away with most of the post-operative complications.

19. Vol. II, 1896, p. 651. A System of Surgery Edited by Treves.

20. W. G. Mayo, Collected Papers, Vol. II, p. 72.

21. Baldwin in West London Journal, October, 1914.

22. Hugh H. Trout, Trans. Southern Surg. and Gyn. Assn., Vol. XXV, 1912, p. 109.

23. *Munich Med. Woch.*, 1911, LVIII, No. 1.

24. *Medical Record*, Jan. 30, 1915.

25. *N. Y. Medical Journal*, 1905, March 13.

26. *American Medicine*, July, 1914.

27. *Med. Klinik*, 1911, VI, No. 1.

IODALIA.—Iodalia, (Geo. J. Wallau, Inc.,) is claimed to be a valuable substitute for iodides. Examination in the A. M. A. Chemical Laboratory indicated that when administered it would act like ordinary iodides and that to obtain the equivalent of 20 gr. potassium iodide it would be necessary to give the contents of a one dollar bottle of Iodalia. Particularly reprehensible among the many unwarranted claims made is one which suggests to the public that Iodalia will protect against infectious diseases. The Council voted that Iodalia be refused recognition. (*Jour. A. M. A.*)

ANATOMY AND PHYSIOLOGY OF THE COLON FROM THE SURGICAL STANDPOINT.*

BY

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This paper is wholly a gleaning from the literature and does not present any new facts. However, its presentation is justified on the ground that a review of known facts in anatomy and physiology may serve to correct erroneous impressions and to call attention to unlearned or forgotten things of vital import, at a time like this when so much effort is being made to apply surgery to every supposed ailment of the colon. In a recent discussion before a surgical section, woeful lack of even primitive knowledge of this structure was manifest. This discussion, participated in by several surgeons of prominence, evidenced the fact that many surgical procedures are predicated upon theories wholly at variance with the well known facts of anatomy and physiology of the colon. Among them may be mentioned the theory that drainage in the colon, or more properly speaking the passage of the contents of the colon, was due to laws of hydrostatic pressure rather than to the well known physiological law of peristaltic muscular contraction. Ultimate failure must follow any surgical procedure which is not based upon physiology.

A brief review of the anatomy and physiology of the small intestine is necessary before entering upon a discussion of the colon, as these two sections of the intestine are very similar. A general knowledge of the subject is assumed. The small intestine is about twenty feet long and is freely movable upon its mesentery, except at the ends, where it is fixed; in all other sections it is supported by a mesentery converging from the entire length of the intestine at the outer border to about eight inches at the attachment along the posterior abdominal wall; such an arrangement necessitates great fluting and free mobility of the gut. The first eight or ten feet are arbitrarily called the jejunum and the remainder the ilium, except the first twelve inches, which has no mesentery and is called the duodenum and into which empty the ducts of the liver and pancreas. The function of the small intestine is to prepare the food for digestion, to continue the process begun in the stomach, to provide for absorption of foods and to pass the indigestible residue into the large intestine.

The anatomy of the colon is so well understood that a minute description is unnecessary. I wish, however, to call attention to a few points of interest. The longitudinal coat of the large intestine does not run in a layer of equal thickness, as in the small intestine, but is collected into three somewhat thick bands, which run equidistant along the colon, forming the taeniae coli; these bands are much shorter than the colon proper and when they are cut the saculi of the colon disappear. The circular muscular fibers are not evenly distributed, as in the small intestine, but are collected into firmer layers between the saculi formed by the shorter taeniae coli. This unequal distribution of muscle fibers has quite an important bearing upon the physiology of the large intestine.

The colon is fixed only in the ascending portion, the caecum, the hepatic flexure, the splenic flexure and descending portion. The caecum occasionally, the transverse colon and the pelvic colon, are freely movable and have a mesentery. These fixed portions have surgical bearing and may require attention; but the movable portions, when from some pathological condition they become fixed, present the most frequent lesion of the colon.

The colon, beginning at the caecum and ending at the rectum, presents different problems for study in every section. The caecum is much larger than any other part, is perpendicular and performs different functions. The contents of the small intestines are poured out into the caecum through the ileo-caecal valve in a liquid condition. Up to this point the contents of the intestine have remained in a fluid state, owing to the fact that chemical processes of digestion take place only in the presence of water. As water is absolutely necessary for body economy, it must be absorbed and this is done largely in the small intestine, but the remainder is absorbed in the caecum and ascending colon almost wholly. A study of the anatomy of the ascending colon will reveal the fact that provision has been made for water absorption by the large size of the tube and by the physiological antiperistalsis which takes place here retarding its onflow. In the small intestine detention of bowel contents is made possible by segmentation movements, etc., but such does not take place in the ascending colon; so, beginning about the middle of the transverse colon, constriction rings arise which prevent the onflow of the bowel contents and waves of antiperistalsis set up which hold the material for water and food absorption.

These waves run towards the appendix and hold the contents until water absorption has taken place sufficiently to somewhat dry the feces into a mass; this is then passed on into the transverse colon at stated intervals, as the remaining food becomes of thicker consistency. Water absorption continues until the feces are of the consistency usual when passed from the bowel. In addition to water absorption, there

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is quite a good deal of digestive activity continued in the contents as they are brought from the small intestine. Some have claimed that the caecum is to the large intestine what the stomach is to the small intestine, that is, a reservoir. The ileo-caecal valve opens and closes under proper stimuli and permits the outflow of material into the large intestine, somewhat after manner of the pylorus in permitting outflow from the stomach. When the contents have passed into the colon, the valve closes and prevents regurgitation as long as there is need for antiperistalsis in the colon. Just what determines valve action is not yet settled, but it is due to nerve action stimulated by physiological processes. When the ascending colon is empty the ileo-caecal valve opens and a new mass is run into it for further attention; the drier portions, which have been passed on into the transverse colon gradually, under the influence of normal peristalsis, are sent down into the descending colon and on into the pelvic colon. It is believed that the rectum is always empty, except during the few minutes preceding defecation. The influx of feces into the rectum stimulates the desire to defecate and unless the desire is attended to the stimulus passes off and may not return for an indefinite time. Constipation arises solely from neglected attention to this stimulus, except in the case of congenital defects.

There is absolutely no evidence that the contents of both the small and large intestines are moved along the tract by other forces than muscular activity. This is manifested by several kinds of movements. In the small intestine we find the following: (a) Rhythmical movements, which segmentate the intestines and thoroughly mix the food without forcing it along the canal; (b) pendular movements, which produce slight swaying of the food back and forth in the canal and act as an aid to the rhythmical segmentation, but do not propel the food; (c) peristaltic movements, which have as their sole function the propulsion of the food contents along the intestinal tract. It is not the province of this paper to study the functions of the small intestines, but I desire to say, in passing, that there is no more interesting process than that of the various movements of the small intestine.

The movements of the large intestine have been the subject of quite a good deal of study during the past few years. It has been shown that the empty colon is perfectly quiescent and that distension is the best of all stimuli to provoke movement. There are three main movements which appear to take place normally in the colon. These are: (1) Antiperistalsis; (2) constriction rings, and (3) peristalsis. It is necessary to study each movement separately, in order to fully understand their bearing upon the problems of surgery.

(1) *Antiperistalsis.*—This is the most frequent and the most interesting movement of the large intestine. When the food products enter the colon they are in a fluid or semi-fluid state and contain the indigestible residue, many bacteria, some food to be digested and much water, etc., the last of which must be removed before the contents can take on the consistency of normal feces. The movement of the food in the small intestine is rapid and the contents of the intestines are subjected to many churning movements and much chemical reaction. While the greater part of absorption and digestion of both water and food has occurred in the small intestine, still there remains much to be done. This is accomplished in the colon, while the food is still in the fluid state. It is shown that as soon as the food begins to distend the caecum and ascending colon, somewhere above the mass, antiperistaltic waves set up which run toward the caecum and have for their object the retention of the food mass in this section of gut, until it has lost the greater part of its water and the remainder of its unabsorbed food products has been taken up. Just where these waves of antiperistalsis begin is a question, but it is practically certain that they may arise anywhere in the colon, up to about the middle of the transverse colon; it is also, well known that the beginning of this wave depends somewhat upon the amount of the food mass present and, therefore, may begin even in the ascending colon provided, that the food mass does not reach beyond this point. With the advent of waves of antiperistalsis, the ileocaecal valve closes tightly and remains so until the food mass has been properly disposed of; a new mass is then permitted to enter and receive treatment. This process continues until all of the food is out of the ilium. While the small intestine absorbs quite a good deal of fluid, the colon is the one portion of the tract which has as its chief function the absorption of fluid; the colon is the great drinker of the body. When the water has been taken up sufficiently the mass is passed onwards into the transverse colon. It is believed that peristalsis finally empties the ascending colon, but not until after the antiperistaltic waves have ceased to act. According to several writers the food residue in the transverse colon has the consistency of normal feces. The human colon is saculated, somewhat like the colon of the herbivora. It has been claimed by some observers that these saculi have independent motion and aid in moving and churning the residue.

(2) *Constriction Rings.*—As soon as the residue begins to pass beyond the area of antiperistalsis constriction rings appear. These constrictions are very similar to peristaltic movements and have the effect of propelling

the mass onward, as they are preceded by dilatation of the colon immediately in front of each ring. These movements continue to propel the mass until it is in the descending colon and into the pelvic colon, which fills up from the distal end. This part of the colon seems to be the reservoir for the feces until the proper stimulus arises for evacuation. Whenever the mass passes into the rectum the desire to evacuate arises. The habit of evacuation after a meal is due to the fact that following a meal peristalsis is more active in all portions of the intestinal tract and this occasions the passing of feces into the rectum, which creates the desire to go to stool. Should this stimulus be unheeded it soon ceases to be noticed and constipation results.

(3) *Peristalsis.*—It has been shown that when the desire to evacuate the rectum arises a peristaltic wave sets up in the colon, beginning anywhere along the transverse and descending colon, and rapidly passes down to the rectum. The action of the colon under the influence of internal distention, such as that caused by an enema, has been studied with some care and the findings are of great value. Experiments have shown that distension from an enema produces a wave of antiperistalsis extending throughout the entire colon, which may even extend on into the small intestine under certain circumstances. Nutritive enemata are easily absorbed when they are sent into the descending colon, caecum and the small intestine by waves of antiperistalsis, but when nutrition depends upon what is absorbed in the colon nutrition rapidly becomes subnormal, except in the caecum and ascending colon, where absorption may be somewhat rapid. In the treatment of constipation, enemata set up antiperistaltic waves, which are rapidly followed by normal peristalsis; this, if properly directed, can be made a very useful therapeutic measure. The consistency of the feces depends not upon the amount of fluid intake, but principally upon the amount of indigestible residue. Starling makes the statement that water intake does not influence the consistency of the feces.

Any form of obstruction of the colon, if acute, produces at first distention, to be followed later by strong waves of peristalsis, which may be very painful. If the obstruction continues, with the ondriving of the bowel contents by peristalsis, and gaseous formation from the organisms present acting upon the food, regurgitation will take place and the small intestine will be filled with fecal material. Should the obstruction continue, it is possible for fecal matter to be passed into the stomach and finally be vomited. Such an occurrence is among the rarities of surgical experience, while vomiting of material with a fecal odor is of frequent occurrence. The most probable mechanism of regurgitant vomiting is that of the well known law of physics that moving substances follow the path of least resistance. Many have contended that antiperistalsis forces bowel contents into the stomach, but physiological experiments and clinical experience seem to disprove this theory. The most probable explanation is that under the pressure of muscular contraction and gaseous distension, the distal end of the bowel being obstructed, the only outlet is through the intestine *towards* the stomach and, therefore, regurgitant vomiting must take place so long as the obstruction persists and paralysis has not set up in the entire intestinal tract.

Now, as to the surgical significance of known physiology of the colon: Much has been made lately of so-called drainage operations upon the colon. A few years ago, we heard much of gastro-jejunostomy to drain the stomach. Post-operative experience taught us that though the anastomosis were present drainage did not occur unless gastric motility was present; further, that a gastro-enterostomy which did not obey the physiological law of gastric and intestinal peristalsis, resulted in that most dreaded condition of a vicious circle. The operation soon fell into well-merited disrepute, except in those cases in which there was obstruction to the natural outlet of the stomach and, if there were still slight patency of the pylorus, stomach contents would seek this outlet by preference; it was demonstrated that *gravity drainage* would not occur. So long as pathology is present almost any unphysiological operation will benefit the patient; but as soon as the physical condition of the patient begins to return to normal, the striking defects of the operations make themselves known both to patient and surgeon. Just note the number of gastro-jejunostomies which relieved the patient for a short while and then had to be undone! The identical thing is now happening with the operations upon the colon, except that the undoing is worse for the patient. No operation upon the colon will be a permanent success that does not take into consideration the physiology of the different sections of the large intestine. The pathological basis for the operation may be worse than the pathology produced by the operation; if so, the patient will be benefited just as much as the operative pathology is an improvement over the pre-operative pathology—and no more. To anastomose a section of colon which has normal antiperistalsis into a section which has peristalsis, is to invite disaster sooner or later; or to leave a blind end to a section of gut will eventually produce its own pathology. Enthusiasts are often blind to defects which others see

plainly, and refuse to detect errors in their own work.

I desire to say that I am indebted to the writings of Cannon, Starling, Bayless, Miles, Elliott, Barclay Smith, Lane, Mummery and many others who have, during recent years, devoted particular attention, both by animal experimentation and surgical experience, to this most fascinating branch of surgery.

RELATION OF APPENDICITIS AND DUODENAL ULCER*.

BY

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The subject of this paper was suggested by the operative findings in several cases in which there were pronounced gastric symptoms and in which the diagnosis of either duodenal ulcer or appendicitis, or a dual lesion, was made.

Eight particularly striking cases were studied. Five were diagnosed as duodenal ulcer, with an associated appendicitis, which diagnoses were confirmed in each case at operation, and three were diagnosed as chronic mechanical appendicitis producing marked gastric symptoms, which diagnoses were also verified at operation.

One of these cases was a peculiarly difficult one to diagnose, as a diagnosis of a gastric or duodenal ulcer had been previously made by two competent physicians, and not for some time following the operation were we quite sure that this case did not present a condition recorded in Moynihan's experience, which caused him to state that, "It is, therefore, probable that, in some instances in which symptoms suggestive of duodenal ulceration have been present and only a diseased appendix discovered, some superficial and inconspicuous lesion of the duodenal mucosa was already established." The history of this case is appended.

Moynihan, Deaver, Wilkie and other surgeons, have for several years observed the association of chronic appendicitis and duodenal ulcer, but the relationship of these two conditions to one another, while conceded by most experienced surgeons, has not been clearly and satisfactorily explained. Are these two important pathological conditions in any way etiologically related? Moynihan very aptly says: "There can, I think, no longer be any question that both gastric and duodenal ulcers are secondary to some toxic or infective process, the various stages of the disorder being infection, congestion of gastric mucosa, with erosion (possibly the result in many cases of retrograde venous embolism as shown by Wilkie (in *Edn. Med. Jour.*, 1911), superficial ulceration and finally chronic ulcer. In many of my cases the primary septic focus would certainly appear to have been in the appendix." Deaver, writing in the *Archives of Diagnosis* (New York), on the relationship of chronic appendicitis and duodenal ulcer, leaves little doubt in one's mind as to the definite connection between these two important pathological conditions. Other well known surgeons of America and abroad have expressed similar views on the subject.

In studying this question, a careful history of the case from the beginning of the mildest symptoms, will often suggest the primary involvement of the appendix; in fact, the difficulty in differentiating appendicitis with upper abdominal symptoms from gastric and duodenal ulcer has long been recognized. Moynihan, in an address to the British Medical Association in 1913, wittily said, "There is no longer any doubt in my own mind that the commonest site of a 'gastric ulcer,' is in the right iliac fossa—that is to say, that in the majority of cases in which the most erudite teaching of the most astute German physicians would justify or compel a diagnosis of ulcer, the patient is suffering from a lesion elsewhere, and more often than not, from a lesion in the appendix." In other words, text-book cases are rare and in the future we must always consider the possibility of a condition with many of the classical symptoms of gastric or duodenal ulcer, being that of a chronic appendix.

Unfortunately, in this country, patients fail to consult a physician or surgeon even after very pronounced gastro-intestinal symptoms have existed for years, and many of these patients have forgotten the early symptoms of their trouble. Two of the patients operated upon by Dr. Doolittle during the past year, had had definite symptoms of a serious abdominal condition for more than fifteen years. Perhaps an appendectomy years ago might have avoided the gastro-enterostomy recently performed.

Kraussold has shown that one-third of all adult bodies reveal diseased appendices. Deaver's statistics show that appendicitis is a disease of early adult life, and Moynihan's statistics show that duodenal ulcer is most common in middle life. Therefore, it is reasonable to believe that appendicitis, where associated with duodenal ulcer, was the primary disease.

Further, the early history of many ulcer cases gives fairly definite symptoms of appendicitis. For instance, three of our cases, operated upon by Dr. Doolittle, gave a history of indefinite abdominal pain, with nausea and vomiting, years ago, and Moynihan claims that

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vomiting in duodenal ulcer is rarely seen until obstruction of some degree occurs. The early history in four out of our five cases of duodenal ulcer, was that of appendicitis, not frankly outspoken cases, nor the same condition of which they complained at the time of operation.

Two of the cases had definite attacks of appendicitis during the past few years. Deaver's experience is, that the type of appendicitis most often found associated with duodenal ulcer is the appendix with one or more calculi in its distal portion and classified pathologically as chronic interstitial appendicitis. In our small series of cases this was the type of appendicitis found.

In all of the cases a definite chronic disease of the appendix existed, and there was a striking resemblance between the cases of appendicitis producing gastric symptoms and the chronic appendix associated with duodenal ulcer.

If our deductions are correct, and some cases of duodenal ulcer are the direct result of a chronically inflamed appendix, how may we explain the development of the secondary condition? This is the mooted question, and few theories or explanations have been forthcoming. However, recent investigations and experiments by Rosenow of Chicago, and Stone and Whipple of Baltimore, I think, offer plausible explanations for the sequence of events. Rosenow says: "Hemorrhages, superficial erosions and definite ulcerations of the mucous membrane of the stomach and duodenum occur not infrequently during severe infections in man." Further, he says, "there can be no question that infection in some instances plays a role in the etiology of ulcer." In his experiments he showed that certain bacteria may have a special affinity for the stomach mucosa, producing a localized infection, and hence may play a role in the causation of the common acute and chronic peptic ulcer.

He actually succeeded in producing ulcers of the stomach and duodenum by intravenous injections of streptococci of the proper grade of virulence, and also by the injection of the streptococcus rheumaticus. He says that the facts are, that at certain stages of morphology, chemistry or what not, these affinities for localization are absolute and very distinct. Therefore, this gives us the basis for our first theory, that is, that certain bacteria with an affinity for the duodenal mucosa, gain access to the body tissues through the appendix, causing appendicitis and subsequently duodenal ulcer. There are two possible plausible ways for the infection in the appendix to reach the wall of the duodenum. First, through the blood stream as an infected embolus lodging in the pancreatico-duodenal artery or the pyloric branch, producing hemorrhagic infiltration and subsequent ulceration as a result of gastric digestion. Second, through the lymphatics. The appendix has three lymphatic chains: One chain runs in the mucous membrane itself, a second chain runs in the submucosa, and beneath the peritoneum runs the third or subserous set. There are three similar chains in the stomach, pylorus and duodenum, and all of these chains run into common nodes.

Mix, of Chicago, says that a fundamental lymphatic law is, that infection follows the lymph vessels not *into* organs, but *from* organs towards other structures. Thus, often in operating for gastric or duodenal ulcer, foci of infection are found in the gall bladder or appendix and frequently in the pancreas. Ochsner found infected appendices in 35 per cent of his gall bladder cases.

The bacteriology of the appendix has been extensively studied by Deaver and he found the colon bacillus alone in 89.8 per cent of his cases of chronic appendicitis, and combined in 96 per cent of his cases. Now, whether the colon bacillus under certain conditions and with a certain grade of virulence, becomes a specific pathogenic organism with an affinity for the duodenal mucosa, or that some of the organisms at times combined with the colon bacillus takes on this role, has not as yet been proven. It would be interesting to know whether the chronic appendices associated with duodenal ulcer show the combined infection in every case or only the colon bacillus.

Prof. DeQuervain of Basil, Switzerland, and Dr. Mix of Chicago, claim that pylorospasm, which is an occasional symptom of appendicitis, causes duodenal stasis and retention and consequent increase of bacteria in that portion of the alimentary tract. Stone and Whipple in their experimental work with intestinal obstruction, found that their dogs died of, presumably, an acute intoxication from a poison secreted by the duodenal mucous membrane, but this conclusion was questioned by Hoguet and Hartwell of New York, because autopsies on their animals showed a focal necrosis of the wall of the duodenum. Without going further into their discussion, is it not a possibility that the mild duodenal stasis and retention produced by pylorospasm, the result of a chronic appendix, with the increase in the bacteria in that region, might in the course of time produce a duodenitis with superficial erosion of the mucous membrane and ulceration?

Hartmann and Lecene of Paris, have found an associated gastritis in 85 per cent of their gastric ulcers, which condition, of course, may have been primary to the ulcer.

The third way in which a chronic appendix may influence the development of a duodenal

ulcer, is suggested by the fact that a chronic appendix may cause an increased gastric acidity, pylorospasm with stasis, and retention of the gastric contents, followed by a hypergastric motility. As a result of the increased motility, the musculature of the stomach becomes hypertrophied, and the forcible injections of the acid chyme through the pylorus causes ulceration in the duodenal wall. This is proven by the fact that the chyme impinges upon the duodenal wall at that part where ulceration is most commonly found. In addition to mechanical action, the gastric juice acts as a chemical agent, digesting the already damaged portion of the intestinal wall.

Preponderating evidence, I think, is in favor of the appendix being the primary lesion. However, Billings and Hunter have shown that gallbladder disease, gastric and duodenal ulcer, appendicitis, arthritis and nephritis, in many cases are the direct result of focal infections in the mouth and tonsils. Therefore, in all probability, chronic appendicitis is the occasional result of infection originating in the base of a duodenal ulcer, the result, perhaps, of a pyorrhea alveolaris or tonsillar infection.

Contrary to the view held by Billings and Hunter, is the recent report of Dr. McKisack, Physician to the Royal Victoria Hospital, Belfast, covering the condition of the mouth in 155 cases in the medical wards of the Royal Victoria Hospital. In part the report states that, "In 19 cases of chronic gastritis, 17 had bad mouth conditions. This is in marked contrast to the ulcers of the stomach and duodenum; the majority of patients in this group had mouths to which but little exception could be taken."

These opinions are confusing, and more work is necessary to clear up the situation.

CONCLUSIONS.

(1) The fact that certain organisms of a certain grade of virulence, have an affinity for certain definite tissues; that gastric and duodenal ulcers have been experimentally produced by the intravenous injection of certain bacteria; that these ulcers occur most frequently in males about the third or fourth decade of life, in the fall and spring when infections are most common, and that duodenal ulcer occurs as a result of burns, only when there is a mixed infection of the skin lesion, seems to conclusively prove that gastric and duodenal ulcers are frequently, if not always, the result of *infection*. The fact that the most important anatomical and histological characteristic of the appendix is the lymphoid tissue it contains; that lymphoid tissue is very susceptible to infection; that appendicitis is a disease of young adults, and most common in males in the fall and spring seasons when infections are so prevalent that 33 1/3 per cent of all adults have a chronically inflamed appendix, and that a chronically diseased appendix is so frequently found associated with duodenal ulcer at operation, leads us to the conclusion that where a diseased appendix is associated with duodenal ulcer, it is the primary lesion and the source of infection in many of these cases.

(2) Focal infections in the mouth and throat perhaps play a less important role in the causation of gastric and duodenal ulcer than was formerly suspected, but is more of an etiological factor in gastric than in duodenal ulcer.

(3) If chronic appendicitis is an etiological factor in the causation of gastric and duodenal ulcer, as seems probable, it would seem wise, adhering to our first principle in therapeutics "removal of the cause," for surgeons to make appendectomy a part of the operation for gastric and duodenal ulcer. This has not been the practice of even our most experienced surgeons in the past and probably accounts for some of the poor operative results in these cases.

(4) It must be remembered also, that at a certain stage in the development of the ulcer, the most experienced surgeons find it exceedingly difficult, where a chronically diseased appendix is found, to exclude the possibility of a superficial ulceration of the duodenal mucosa having already been established. Moynihan and Paterson have reported such cases and I believe one of the cases operated upon by us also bears out that experience. The history of this case follows:

Miss B., 25 years of age and single. Chief complaint: Severe cramping in epigastrium, indigestion, "sour stomach" and diarrhea.

She has had all the usual children's diseases. Has had follicular tonsillitis a number of times. No suggestive history of tuberculosis or cardiac disease. Has had "waterbrash" and indigestion since childhood.

The family history is unimportant. She is a nurse, in training, and her duties are exacting.

For several years the patient has suffered with indigestion; that is, a fullness and discomfort after meals. She developed a diarrhea about fourteen months ago, without any apparent cause and without other symptoms. The condition was very resistant to treatment, but was finally controlled with very large doses of bismuth. The diarrhea would begin in the early hours of the morning and subside towards evening. After the first attack she enjoyed a month of relief, at the end of which time she again suffered with diarrhea, which was this time accompanied by definite symptoms of hypergastric motility and pylorospasm. The pain was spasmodic in character and not referred. The *x*-ray showed marked gastric hyperperistaltic movements. There was never any demonstrable gastric retention. Gastric analysis showed a moderate hyperacidity. The pain bore no relation to meals. Rest in bed and careful dieting relieved the diarrhea temporarily, but the cramping returned. Drugs, such as sodium cacodylate, emetin, etc., also gave temporary relief from symptoms.

Beginning three months ago, for the first time, the cramping began to bear a definite relationship to the ingestion of food, the pain beginning as soon as food reached the stomach and continuing until relieved by bismuth, soda or paregoric. The attacks bore no relation to the menses.

After competent medical treatment failed to control the condition, surgical exploration was advised.

Abdominal exploration was made by Dr. Doolittle. A right rectus incision was made opposite the umbilicus, to permit of thorough exploration of both the lower and upper abdomen.

There was a marked degree of enteroptosis. The gall bladder was normal. The pyloric end of the stomach and duodenum was negative to inspection and palpation. The stomach was carefully examined with negative findings. There was nothing suggestive of ulcer in either stomach or duodenum.

The caecum was delivered, only after the incision was prolonged downward, because of a fairly well developed pericolonic membrane and an adherent appendix. The appendix was kinked and adherent in its distal half, contained two or three small faecal concretions and crackled to palpation. It was constricted about an inch from its base.

With the negative findings in the upper abdomen, the definite pathology in the appendix was considered sufficient to explain all of her symptoms. So the appendix was removed and the abdomen closed in the usual way. As in similar cases reported by Moynihan and Paterson, after the removal of the appendix she was better, but still suffered from acidity and hypergastric motility.

It is but fair to say that since the presentation of this paper before the Dallas County Medical Society in February, which was only a few weeks after the operation, the patient has steadily improved in health, her symptoms have gradually disappeared and now the patient is enjoying good health, having gained several pounds in weight and is able to do full duty.

An important thought here is that this patient may have had the superficial erosion of the gastric mucosa described by Moynihan, and following the removal of the cause, the motility and gastric secretions gradually became normal and allowed the ulcer to heal.

I desire to thank Dr. H. M. Doolittle for the privilege of studying these cases, which were operated upon by him during the past few months.

Expurgo Anti-Diabetes.—The claim made for Expurgo Anti-Diabetes (sold in Canada as Sanol Anti-Diabetes) that it is "The only positive cure for Diabetes" and others of this character should be sufficient to condemn it. Nevertheless medical journals advertise it and physicians have been found to give testimonials for it. Examination in the A. M. A. Chemical Laboratory showed that Expurgo Anti-Diabetes is essentially a watery solution of plant extractives with small quantities of sodium salicylate and salt. The exploiters claim that their stuff contains the fruit and bark of jambul, rosemary, star anise and fluid extract of calamus, cinchona, cola, condurango and gentian. One of the claimed ingredients, jambul, was in vogue as a remedy for diabetes some years ago. It was tried and found wanting and relegated to the therapeutic scrap heap. —(*Journal A. M. A.*)

SLIDING HERNIA OF THE COLON*.

BY

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At the outset of this paper I wish to apologize for presenting a subject about which my personal knowledge is so limited. It is most interesting, however, to follow those with an operative experience sufficiently large to enable them to write intelligently upon a subject not very familiar to the average surgeon. Some of these writers freely admit their early mistakes and hang out the signboard of danger to the unsuspecting operator.

As regards the frequency of this variety of hernia there is a difference of opinion: Moschowitz, who has written an interesting article on this subject[1], is inclined to the opinion that it is more frequent than the literature on the subject would indicate, from the fact that surgeons are loath to record unpleasant experiences. Sprengel, in his Classic Review, dwells upon its neglect as an individual lesion. He recites that in 1902, Hildebrand found notes of 128 cases of cecal hernia, and in 1905, Baumgarten compiled notes on 159 cases of sliding hernia. Sprengel himself reports from his own clinic 800 operations for hernia made during fifteen years, among which number is found 13 cases of sliding hernia. Wier of New York[2], reports a number of cases in which the cecum and sigmoid were involved. Finsterer of Vienna[3], states that his attention was called to sliding hernia by reading Sprengel's article, and reports three cases from Prof. Hocheneggs' clinic. In two of these cases he operated successfully by the method known as mesocolopexy, first described by Moreston in 1900. To the French surgeons we owe the name of sliding hernia, as well as our most valuable contributions on the subject. Jaboulay and Patels, in an article written in Paris, in 1908, on *Hernia of the Large Intestine,* give the subject of sliding hernia careful attention. Coley of New York, in his article on Hernia[4], calls attention to sliding hernia and Schmidt's method of operation. A few have reported cases in this country within the past year, but have not made a careful analysis of them. Dr. C. C. Cody tells me that during his residence at Bellevue, 1910 to 1913, they were constantly on the lookout for cases of sliding hernia and that those found were usually on the left side.

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*Read before the Section on Surgery, State Medical Association of Texas, Fort Worth, May 4, 1915.

1. *Annals of Surgery*, April, 1914.
2. *Medical Record;* 1900, Vol. LVII, p. 309.
3. *Wien. Klin. Wochensehrift;* 1913, Vol. XXVI, p. 1930.
4. *Progressive Medicine;* June, 1915.

As there seems to be a difference of opinion as to what really constitutes a sliding hernia and how it is caused, I shall attempt to present the subject in a discussion based on the most accepted opinion, and the one that appears most rational.

In the first place, a sliding hernia is almost without exception, inguinal, although in Baumgarten's 159 cases, 89 were right-sided inguinal, 63 left-sided inguinal and 7 femoral. In order to get a clear idea of sliding hernia it is necessary that the visceral anatomy and its relation to the internal ring be carefully studied. We know that the distinguishing feature of a sliding hernia is the fact that when it presents or emerges through the ring it has no enveloping sac of peritoneum; in fact, it is practically a sacless hernia. When found, however, in conjunction with an ordinary inguinal hernia, the wall of the larger bowel on its inner side forms the outer boundary of the upper portion of the hernial sac. As the ascending and descending colon are the only portions of the intestinal tract not covered by peritoneum, we are forced to the conclusion that a sliding hernia must originate in either one of these two locations, *viz.*, the ascending or descending colon.

In the literature we find frequent references to the sliding hernia of the cecum, appendix and sigmoid, but as both of these portions of the colon are completely invested by peritoneum, they could only be involved in this hernia by a general downward traction or ptosis, and would not be the first presenting part.

A most interesting question in connection with this kind of hernia is the etiology; why the uncovered portion of the colon should be released from its normal attachments and pass beneath the parietal peritoneum and emerge at the inguinal ring. Coley attributes the condition to an anomaly of location, but most authorities think it is due to the increased weight from an overloaded bowel. As it is usually found in elderly people the process must be a slow one and greatly assisted by intra-abdominal pressure. It is thought by some that the gut becomes stripped of its peritoneal coat in its descent, but a careful observation of the hernial contents has proven that this is not the case. In fact, the condition is now recognized to have the same cause that enters into all other ptoses of the abdominal viscera. The direction taken by the bowel must necessarily be first backward, and then downward and inward until it reaches the inguinal ring. Judging from the description of the cases reported, the size of the hernia depends largely upon whether or not the ring has been previously enlarged by an old inguinal hernia. In such an event it is common to see both the large and small intestines involved in a large hernial protrusion, the restoration of which is both difficult and dangerous. In the majority of cases, however, there is only a small, rudimentary sac laying to the inner side of the partially protruding bowel and no difficulty is experienced in returning the latter by inversion to the retro-peritoneal fossa and closing by the Bassini method.

In either of the above varieties the operation for the proper restoration of the parts is not necessarily difficult, if a correct diagnosis is made sufficiently early in the operation. There are no certain signs by which the condition can be determined before operation. If the deperitonized bowel is the most prominently presenting part it may be, and often is, mistaken for an ordinary hernial sac. On this account it is frequently opened by mistake. This is not serious, however, as it can be immediately closed and the question of diagnosis cleared up. If the sac alone presents and is opened up without a proper recognition of the fact that the bowel forms an integral portion of the sac at its upper and outer margin, the mistake may be made in attempting to separate it from the large intestine, by mistaking the continuous union for adhesions. Cases have been reported of this kind where the vessels supplying the large intestine have been severed to such an extent for supposed adhesions that, not only was the hemorrhage alarming and hard to control, but the circulation of the bowel cut off to such extent that resection and semi-castration were necessary. Some deaths have also been reported.

It may be possible in some cases, even after a proper diagnosis has been made, that the difficulty of replacing the large bowel in the retro-peritoneal fossa is extreme, due either to the contracted space or to real adhesions behind the peritoneum. In the more difficult cases of this kind the operation of mesocolopexy, as mentioned before, would seem to be indicated. This consists of laparotomy incision made above the ring of sufficient size to liberate any real adhesions that might exist and at the same time suture the bowel in its original site to the iliac fascia. The operation would appear to be simple and free from danger.

I regret to state that I have only one case of true sliding hernia to report, although I have seen a number of cases in which the cecum, appendix and large intestine were present in a large scrotal hernia. It is well, therefore, for us to bear in mind that the presence of the colon in a hernial sac does not necessarily mean that we have a sliding hernia with which to deal. Report of my case follows:

J. C., aged 57 years, admitted to hospital October 4th, 1914, for herniotomy. Protrusion was rather large on the left side, at the site of the internal inguinal ring. The tumor was entirely confined to

the canal and gave same appearance of being a direct hernia. It could be easily reduced, on account of the large ring but would quickly reappear. The usual preparation for a Bassini was made. Nothing unusual was noted until the supposed sac was reached. Here there was a soft, bulging mass, covered with a thin net-work of supposed peritoneal fat. Between the interstices of the fatty layer the supposed sac was picked up by forceps. To our surprise the incision revealed the fact that there was no sac and an opening had been made in the large intestine. This was immediately closed and a further effort made to find the sac which was located; it was small, rudimentary, collapsed and entirely empty, located to the inner side of an adherent to the large intestine. From the size of the elongated sac there was no evidence that it had ever been occupied by intestinal contents. No attempt was made to separate the sac from the bowel, but it was tied off as high as possible and the hernial protrusion returned to the retro-peritoneal fossa. The patient was well muscled and a good closure of the ring was made. He left the hospital in eighteen days. In a letter recently received, in answer to some questions asked, he stated that he thought the trouble started by jumping in a pit, in 1905, and that for years afterward he would have a burning sensation in the groins, with more trouble at times than at others; that about twelve months before operation the condition began to grow much worse and would swell a good deal more after being on his feet during the day. Six months before operation he consulted his family physician, who advised an operation. Instead, a truss was procured but he could never see that it did any good. The pain was described as "boring" in character and grew steadily worse until he reported for operation. He stated that he had never suffered from constipation, and that the hernia was getting larger. He now reports great relief and no more bulging, but there is still a little annoyance at the site of the operation, after being on his feet for the greater part of the day.

In conclusion, I wish to urge that, while cases of sliding hernia are not frequent, the subject is of sufficient importance to be carefully considered and this variety of hernia always anticipated. We may gain knowledge by our mistakes but it is not the kindest method from the patient's standpoint, nor the one that will inspire the greatest confidence in the operator.

ABSTRACT OF DISCUSSION.

Dr. F. C. Beall, Fort Worth, said: Dr. Knox has said "We can learn from our mistakes" but the proper time to study complicated surgical conditions is not after we have uncovered them with our scalpel, and I think the chief value of this paper is that it serves to bring back and make fresh in our minds, a complicating condition of a very common disease.

In speaking of the etiology of sliding hernia, Dr. Knox states that since the ascending and descending colons are the only parts of the large intestine normally not entirely covered by peritoneum, one of these must be the first part to present in this form of hernia. Such an explanation assumes either a congenital abnormality in the attachment of the large intestine or a migration of the normal attachment from the posterior wall of the abdomen to the region of the internal abdominal ring. While a low attachment of the colon is probably essential for the development of this hernia the simpler, and therefore to me more satisfactory, explanation of its occurrence is that a covered part of the gut close to the attachment presents and then, as the hernia develops, the sac is formed by peritoneum peeled off the colon. I believe Dr. Knox's reference to a sacless hernia would never be strictly correct. In the case he reports he found a sac to the inner side of the sigmoid and I believe the peritoneum forming this sac originally formed the covering of the intestine.

In regard to the treatment of sliding hernia, I think the difficulty lies in separating the intestine completely and cleanly from the structures which form the inguinal canal and returning the colon to the abdominal cavity, so there will be no undue pressure on sutures during healing. To accomplish this latter the secondary abdominal incision is of value.

In the discussions of the treatment of inguinal hernia, I think too much stress is laid upon the care of the sac. As a matter of fact, I believe, results would be just as good with our modern methods if the sac were ignored entirely. In dogs and other lower animals the males have normally a patent funiculor process; that is, the tunica vaginalis testis is continuous with and a part of the peritoneum, yet male dogs only very rarely have hernia, while it is very common in the females. This is due, I think, to the weakening effect of pregnancy on the abdominal muscles. So, in sliding hernias I believe if we can clean well the muscles and ligaments which form the inguinal canal and replace the intestine without too much pressure being left on these structures, our results ought to be almost, if not quite as good as with the simpler forms of hernia.

PERITONEAL ADHESIONS, PRE-OPERATIVE AND POST-OPERATIVE.*

BY

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1. THE PERITONEUM.

(a) Anatomy; (b) Physiology; (c) Pathology.

(a) The adult peritoneum[1] is a closed sac consisting of two layers, separated by a capillary space. One layer, called the parietal peritoneum, lines the inner surface of the abdominal wall, the other invests the viscera in the abdominal cavity and is termed the visceral peritoneum. The visceral layer not only invests the viscera themselves, but also the ligaments which pass from the abdominal wall to the viscera. In the male, the peritoneal sac is closed upon all sides. In the female, it communicates with the vagina by the fallopian tube. The peritoneum itself consists of a serous and a subserous coat. To understand the deflections and contortions of this membrane, it is necessary to refer for a moment to the embryology of this

*Read before the Section on Surgery, State Medical Association of Texas, Fort Worth, May 4, 1915.

1. Sobatta and McMurrich: Atlas and Text-Book of Human Anatomy, 1909.

structure, where it will be shown that when the intestinal canal is still a straight tube and the future stomach is simply a fusiform dilitation, the common mesentery of the entire gut passes from the posterior abdominal wall and aorta to the primitive gut as a narrow lamina situated approximately in the saggital plane. The subsequent development of the viscera and their rearrangement into the final position, necessarily produces tortion and elongation of some of the mesenteric folds, and the formation of adhesions between the parietal and visceral layers in some portions.

These changes are noticeable about the stomach, liver, pancreas and throughout a large portion of the colon. The ascending and descending colons originally possessed an independent mesentery like the transverse and sigmoid colons, but between the fourth and fifth months of embryonic life, first the ascending, and then the descending mesocolon, becomes adherent to the primary parietal peritoneum in the region of the kidneys, the result being their fixation to the abdominal wall. We believe that in this process of adhesions of the peritoneal layers some explanation may be found of the existence of some of the various "veils," "membranes" and "kinks," which have been frequently referred to by recent authors.

(b) The function of the peritoneum is first mechanical, providing a smooth, glistening surface for mobility of the viscera and aiding in their ligamentous support; second, the richness of its lymphatic and vascular supply permits an endosmosis by which one-tenth the body weight may be absorbed in 30 minutes[2], as experimentally proven on the dog, and an exosmosis by which plastic adhesions may be formed in from 6 to 10 hours.

(c) The peritoneum is sensitive to the slightest trauma and irritant, and inflammatory changes are noticed invariably after the touch of the hand, or the introduction into the cavity of any irritating substance. Its wonderful sensitiveness is responsible for the early adhesions of its surface and the walling off of infections. How completely this walling-off process may apply is familiar to us all.

2. PERITONEAL ADHESIONS OF CONGENITAL AND EVOLUTIONARY ORIGIN.

(a) Etiology; (b) Symptomatology; (c) Treatment.

(a) The etiology of this class of adhesions has been mentioned in the discussion of the embryology of the peritoneum, where we have shown that bands or folds of varying density may exist at any point where a readjustment of the primitive parietal and visceral layers takes place. Whether or not those bands frequently seen about the caecum and terminal ileum, are of embryological or post-natal origin, is still a debatable point; but some of the theories of their formation are given here, as outlined by Bainbridge[3].

"*Embryonic or Congenital Theory.*—In an early stage of fetal life, the entire abdomen is filled with bands, resembling the conditions seen after an attack of peritonitis. Toward the conclusion of fetal life, these bands disappear, and the adhesions melt away, although some may persist as certain investigators have maintained. In order to determine how frequently such bands may persist and become factors in the production of chronic intestinal stasis or other abnormal conditions involving the abdominal viscera, it will be necessary to examine carefully a large number of young infants as well as fetuses at various stages of development."

Chapple reports having dissected twenty-eight fetuses without finding bands of the type associated with "Lane's Kinks" and chronic stasis. Prof. Keith, of the Royal College of Surgeons, London, examined fifteen fetuses, in three of which he thought there was a rudimentary band that might be a factor in producing stasis. Eastman and other investigators have found a larger proportion of these prenatal structures, which have been thought to persist, in some cases, in the adult, giving rise to some of the disturbances in which the gastrointestinal tract is concerned. It is not within the scope of this paper to discuss the weight of evidence concerning the theories proposed to account for the existence, in the fetus, of these abnormal structures. More study is necessary before a conclusion can be reached.

Inflammatory and Infectious Theory.—The inflammatory and infectious bands may be classed as (1) endogenic, resulting from peritoneal reaction from infection within the colon, and (2) exogenic, resulting from infections transmitted from some inflamed organ in the immediate vicinity. Prolonged or repeated mild infections of the intestinal wall, are considered by Pilcher as a causative factor in the production of these membranous bands. Gerster assumes a reaction of the peritoneum to infections and chronic inflammation of the colon, in the form of "characteristic vascularized transparent membranes (pseudo-peritoneum), which take their origin along the external lateral aspects of the cecum, ascending colon and hepatic flexure on one side, and the sigmoid flexure, descending colon, and splenic flexure on the other."

Inflammation, undoubtedly, plays a part in the formation of some forms of the mem-

2. Eisendrath: Clinical Anatomy, 1904.

3. Bainbridge, W. S.: *Boston Medical and Surgical Journal*, 1914.

branous structures found within the abdominal cavity, and hence, in the production of intestinal obstruction of one kind or another. It seems, however, that all these formations are to be distinguished from those which Lane described as being mechanical or evolutionary in origin. For, as Lane has shown, these acquired bands, which he calls evolutionary, commence at a point most distant from the intestine, gradually approaching and securing the bowel. Inflammatory bands, on the other hand, commence at the point of attachment, progressing away from it.

Mechanical or Evolutionary Theory.—Lane has laid down the following laws, governing the changes which take place in consequence of the altered mechanical relationship of the individual to his surroundings:

(1) "That pressure produces changes in the structure and form of the bones and in the form and function of existing joints, while it determines the formation of new joints.

(2) "That strain produces change in the form of bones, and in the form and function of existing joints, and also produces new joints.

(3) "That when, apart from the exercise of pressure or strain, it is important, from the altered mechanical relationship of the individual to his surroundings, that a mechanism should be modified or an entirely new one developed, such a change takes place."

These same mechanical principles, according to Lane, govern the soft parts of the body and modify their structure. Following this line of reasoning, he has applied these laws to the abdominal cavity and in this manner has accounted for the development of the various adventitious structures, which he associated with chronic intestinal stasis in the majority of cases.

The membranous adhesions between the outer wall of the colon and the abdominal parietes, as well as in other segments of the intestinal tract, which were noted by Lane in cases of chronic intestinal stasis, were interpreted by him as newly developed accessory ligaments, serving to counteract the tendency to enteroptosis incident to the disturbed mechanical relations of the bowel consequent upon the assumption by man of the upright position. In other words, the origin of these bands about the ascending colon, hepatic and splenic flexures, sigmoid, and other portions of the gastro-intestinal tract, is referred by him to the mechanical factors of chronic constipation and the upright posture. He holds that nature attempts to relieve the strain of the persistent enteroptosis, and that the dragging of the displaced bowel is offset, as it were, through hypertrophy of its membranous supports—"the crystallizations of resistance," "the crystallization of lines of force,"—a physiological response to a mechanical demand which conforms to the three laws as stated by him.

Among the more popular types of this class of adhesions may be mentioned:

(1) The Bloodless Fold of Treves. This fold is described by Reid as follows: "Passing from the mesenteric border of the appendicular cecum and from the nonmesenteric border of the last part of the ileum to the posterior and lateral abdominal wall, is a sheet of the peritoneum. This forms the anterior wall of a fossa completely closed save below."

(2) The Parieto-Colic Peritoneal Fold of Jonnesco and Juvara. In the majority of the cases this fetal fold arises from the peritoneum at the left or inner side of the ascending colon, passing over the anterior aspect of the ascending colon in an upward slanting direction. It is attached to the parietal peritoneum at the right of the ascending colon. It may adhere to the anterior and lateral aspects of the colon. Practically the same relations as are presented by Jackson's membrane, when found in the adult, have been attributed by Reid to the above described fetal fold.

(3) Jackson's Membrane. Jackson described this structure as follows: "From a point just at the hepatic flexure to three inches above the caput coli, there spreads from the parietal margin over the external lateral margin to the internal longitudinal muscle band, a thin vascular veil, in which long straight unbranching blood vessels course, most of which are parallel with each other and take a slightly spiral direction over the colon from the upper peritoneal attachment to the inner lower portion of the gut, ending just above the caput. The appendix is not implicated in any way. Coursing with the blood vessels are numbers of shining narrow bands of connective tissue, which gradually broaden as they go and end in a slight fan-shaped attachment at various points on the anterior and inner surfaces of the colon. At these points of attachment, the gut is held in rigid plication. At the beginning of the hepatic flexure the drawn membrane particularly angulates the contained colon."

(4) The Genito-Mesenteric Fold of Douglas Reid. This fold of peritoneum, which is said to be rather common, passes from the mesentery of the terminal segment of the ileum down into the pelvis, being attached in the fetus to the genital gland below. It has, therefore, a secondary connection with the ileum and, through the peritoneum of the meso-appendix, with the appendix itself, under which it passes. This connection is perhaps responsible for the frequent association of appendicitis and oöphoritis. Adhesions of the colon to the peritoneum of its own mesentery were also pointed out by Reid. This genito-mesenteric fold is

found in a surprisingly large percentage of fetuses after the seventh month, or even after birth at term, and Eastman has found it in the adult.

(5) Attic Adhesions (Morris). "Anatomists have noted that web-like adhesions were found in the bile tract region so frequently that they seemed to be almost a normal characteristic of the region. We used to feel the same way about adhesions in the cecal region. Byron Robinson called attention to the fact that adhesions were found in the bile tract region more frequently than elsewhere in the peritoneal cavity, excepting in the pelvis in women; and that the cecal region stood third in order of abundance of adhesions." Peritoneal adhesions, according to Morris, are found to some degree in almost every adult on postmortem examination. Those in the upper part of the abdomen, he has aptly called "attic adhesions."

(b) The symptoms arising from kinks or bands are primarily a stasis of the intestinal contents, pain of varying intensity, neurasthenia and impaired nutrition, acute and chronic obstruction.

(c) Treatment necessarily includes the relief of existing conditions, whether it be required to simply divide the bands with tucking in of surfaces or whether it be required to short circuit the colon as advised by Lane. In the treatment, belts, laxatives, lubricants and exercise have their places and advantages.

3. PERITONEAL ADHESIONS OF TRAUMATIC AND INFLAMMATORY ORIGIN.

(a) Etiology; (b) Prophylaxis and Treatment.

(a) Direct violence, bacteria, foreign bodies, perforation of the gall or urinary bladder, the intestine or pancreas, form the most frequent source of peritoneal inflammation and adhesions. These are the most common types met with by the surgeon and constitute one of our chief responsibilities in relieving them by prophylaxis or surgical procedure.

(b) The prevention of post-operative adhesions has impressed its importance upon us as we more frequently have had opportunity to explore the abdomen a second time. In a series of 1,000 laparotomies, we have had occasion to explore the abdomen a second time for the relief of pain, obstruction or newly acquired disease, in 6 cases. In only one case, which was originally a simple appendectomy, did we find the absence of adhesions.

In all the other cases, adhesions were dense and obstructive. This does not include the much larger number of cases which have complained of post-operative pain of supposedly adhesive character, yet not sufficiently urgent to justify operation for its relief. We believe that an estimate of 25 per cent would not be high for abdominal cases, which have post-operative adhesions of an annoying if not dangerous character. Many prophylactic measures have been offered from the list of medicines, including aristol, sterile animal and mineral oils[4]. In our experience these have been of doubtful value. Unquestionably the covering of all exposed peritoneal surface within the peritoneal cavity, with eversion of the parietal layer along the line of incision, as suggested by Murphy, is of importance; and when fortified by the application of omentum, without tension, to the traumatised viscera, forms the most adequate means at our command.

Our results in the use of paraffin oil in the abdominal cavity are similar to those observed in the experiments of Sweet, Chaney and Wilson[5], on the dog, in which their entire series of dogs, killed at varying intervals after the injection of the oil, showed widespread peritonitis and plastic adhesions. In 5 of our cases in which oil was injected, we observed one of fatal peritonitis and a second of such widespread and dense adhesions of the ileum, that entero-enterostomy was finally adopted after the third laparotomy for relief.

Experiments with omental and mesenteric grafts, in the hands of the above observers, are gratifying, and if found practical will solve most of our difficulties, as many of the areas to be covered are not reached by the omentum in its normal relations; but there are few cases in which autogenous omental grafts are not available.

4. Mayo, W. J.: *Surg. Gynecology and Obstetrics*, March, 1911.
5. Sweet, Chaney and Wilson: *Annals of Surgery*, 1915.

SPLANCHNOPTOSIS.*

OPERATION; SUSPENSION OF LIVER AND STOMACH; RETROPERITONEAL IMPLANTATION OF THE COLON; MEMBRANOUS PERICECITIS; CHRONIC APPENDICITIS; APPENDECTOMY; OPERATION UNDER ANOCITHESIA; PAINLESS CONVALESCENCE; RECOVERY.

BY

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The subject of my lecture today is one of very general interest. I shall deal with conditions that are the underlying cause of an altogether too familiar complex of symptoms. Chief among these symptoms are, constipation, with or without headaches; more or less disturbance of digestion, varying from simple acidity to serious ulceration of the stomach; nervousness and mental depression, the latter amounting at times to simple melancholia; general toxemia, causing in some instances a marked acidosis; all associated with more or less pain in one or more corners of the abdomen, that

*Clinical lecture delivered in the Cincinnati General Hospital, Cincinnati, Ohio.

in the lower right and the upper left quadrants being generally the most marked. Sometimes the pain is so marked in the lower right quadrant that I have come to designate the condition as one of pseudoappendicitis. With all of these symptoms, we have the overriding condition of general inefficiency, amounting in many cases to positive invalidism.

This is a clinical picture, a sort of clinical composite, familiar to every practitioner. There is no county of average population in the United States in which there are not many, sometimes hundreds of these unfortunate victims, whose actual condition is overlooked, who are treated from day to day by the cheap but disastrous expedient of cathartics, or are having their stomachs persistently washed out, regularly laundered, for conditions that are not in the stomach at all, or who are being submitted to drainage operations upon the stomach when the stomach is not the offender; or, finally, who are being sent about to "Spas" and "Springs" and "Cures," when nothing but surgery, and happily, safe and today painless surgery, offers a prospect of cure.

This type of case, a case of Glenard's disease, is now being brought into your presence. The patient is 41 years old, married, a housewife, and was referred to this service by my colleague, Dr. Mark A. Brown, chief of the medical service. She was operated upon here about five years ago for the removal of a neoplasm of the right ovary. She convalesced thoroughly and satisfactorily from that operation and enjoyed excellent health until about six months ago. At that time, she did some heavy lifting which was followed by sudden pains and the onset of what has since developed into a most persistent constipation. This sluggishness of the bowels has been followed by the usual train of toxaemic symptoms. She has had more or less "nervousness," sleeplessness and headaches with, lately, almost constant hebetude. In the meantime, her digestion has gone to smash. She regurgitates her food and complains of extreme acidity of the stomach, associated with the classical boring pain an hour or two after meals, and located in the right upper quadrant of the abdomen. Her chief complaint, however, and the one that brought her to my service, is a pain in the right ovarian region, the side from which the neoplastic ovary with the tube were removed five years ago.

Physical examination of this patient is very interesting. On inspection, it is observed that the upper zone of the abdomen is more or less flat, while the lower zone, that lying below the umbilicus, is distinctly distended. It may be observed that the distension on the left side of the lower zone is greater than that on the right. Percussion reveals the fact that the upper zone is nonresonant, while the lower zone is resonant to a degree little short of tympanitic. Palpation does not elicit tenderness or pain at any point, although the patient tells me, when I reach the region of the spleen, that she often has pain in that locality.

I now examine the pelvis and find the uterus in normal position, but having limited mobility. On the right side of the uterus is a mass apparently about the size of a hen's egg, which gives her a sickening feeling when it is touched. This mass is immovable and, while not solid, it does not seem to be fluctuating.

Now, let us go back and analyze these symptoms. Remember that the patient was well until six months ago, when her present symptoms began following a severe strain while lifting. Palpation and percussion show the absence of the stomach and colon from their normal locus in the upper zone, while the distension and resonance below show that they have descended into the lower zone. The relatively greater distension on the left side shows that the stomach is hanging vertically from its oesophageal attachment. The indigestion, regurgitation and acidity, especially when associated with occasional pain in the left upper quadrant, are generally interpreted as the symptom complex of gastro-duodenal ulcer, causing pyloric insufficiency and consequent pain from distension of the cardia.

These are precisely the patients that are prone to become habitues of the stomach laundries, the facile swallowers of the persistent tube, the patient martyrs to interminable washings. I now know from ample experience with literally hundreds of cases that this symptom complex, while doubtless indicating a low grade chronic gastritis or possibly, simple erosion of the gastric mucosa must in the final diagnostic analysis be referred to other and more distinctly underlying conditions in the stomach and intestines. The pain in the upper left corner is but rarely, if ever, caused by distension of the cardia. This pain is generally referable to the splenic flexure of the colon, and is due to the obstructive influence of acute angulation of the large bowel at that point. In other words, this gastrointestinal complex of symptoms, properly interpreted, points to an underlying and consequently causative condition. Sir Arbuthnot Lane has emphasized the fact that these gastric symptoms, even when the presence of blood in either the stool or vomitus or both, indicates actual ulceration, are the result of failure in physiological drainage of the stomach. Going a step further, we find that this failure of normal gastric drainage is due to obstructive angulations of the intestine, incidental to their more or less complete ptosis. An intermediate factor that aggravates the obstipation is the development of adhesions between proximal surfaces, thus tending to develop fixed and progressively more acute angulation of the ptosic intestines. When we take all these facts into consideration in connection with this case, and especially when we consider her obstinate constipation with resulting constitutional symptoms of auto-intoxication, we are forced to the conclusion that we are dealing with a more or less general splanchnoptosis of the abdominal viscera. I venture this diagnosis without recourse to the Roentgen rays; the symptoms have, through experience, come to have such definite significance, that I find the pictures to be of diminishing importance. But, you ask, what about the lump in the pelvis—the mass that has developed where she has neither an ovary nor a Fallopian tube? I am frank to say that I do not know. It is obviously pathological and further justifies the exploratory incision that I shall now make.

This patient is already quietly sleeping from rectal etherization and will require but little, if any, further attention from the anesthetist. I now infiltrate the line of incision and, as I go on, shall infiltrate each succeeding layer of the abdominal wall, in accordance with the established technique of anocithesia. The lower zone of the abdomen is first opened in the median line along the old scar. On opening the cavity, the transverse colon is observed lying anchored at the brim of the pelvis. I now explore the mass at the right of the uterus. It seems firmly adherent to the broad ligament. With the patient in the Trendelenberg position, the intestines do not gravitate out of the pelvis. The cecum is anchored. I now endeavor to enucleate the mass which, after much difficulty, I am able to peel off from the floor of the pelvis. As I bring it up, I find that it is the cecum, the vermiform appendix and a loop of the ileum, doubled upon itself, all forming an apparently homogeneous mass. These structures are separated by sharp edge dis-

section. An extensive Jackson's, or more properly, Kramer's membrane, is cleared away from the ascending colon. A number of shoe-string adhesions between the ileum and the jejunum and other structures are divided. The pelvis is then filled with sterilized olive oil. This keeps the separated surfaces from reuniting and, according to the observations of Vance and Grant, remains in the peritoneal cavity longer than ten days. The peritoneal margins are now held together temporarily by hemostatic forceps, while the operation is completed in the upper zone.

An incision parallel with and about two centimeters from the margins of the right costal cartilages, is carried through the various structures up to within an inch of the ensiform. From this point, it is carried directly across to a corresponding point on the other side of the intercartilaginous interval, the heads of the recti, the fascial and peritoneum being divided. The flap thus formed is everted and the peritoneum dissected from the underlying fascia. The colon is then brought up and out of the upper incision. The mesocolon is shortened by numerous parallel sutures, extreme care being taken to avoid the blood vessels and chyle ducts. The transverse colon, beginning at the hepatic flexure and extending to near the splenic flexure, is implanted by means of its omental base to the deep fascia. The hepatic peritoneum is then subjected to gauze friction until studded with punctate hemorrhages. The round ligament of the liver is then brought up and transfixed by a strong loop of fascia from the upper lip of the wound, thus effecting a hepatopexy. The wound is closed by a continuous hemostatic suture, several loops of which are made to catch up goodly bites of the small omentum, thus affording an independent anchorage for the stomach *in situ normalis*. Both incisions are now closed by continuous laminated suture.

And now, what have we accomplished? In the first place, we have cleared up the diagnosis within the pelvis, which could not have been done without surgical exploration. We have straightened out the kinks in the intestines and thus eliminated the purely and plainly mechanical cause of obstipation. We have thus restored the normal drainage of the stomach and we hope, put an end to her dyspepsia and probable erosion. We have, incidentally, restored the fecal current and thus, we hope, put an end to the hyperabsorption which is the fundamental fact underlying her autointoxication. In short, we believe that we have cured this patient. We are gratified to think that, thanks to anocithesia, her awakening and her convalescence will be free from pain.

Now let me say a few concluding words about splanchnoptosis. Sometimes it exists without any assignable cause, a fact which, in such cases, suggests its probably congenital origin. In these latter cases, however, the symptoms do not develop, as a rule, until after the lapse of several years, a fact which points rather to developmental changes during childhood. The ptosic process may involve all or only a few of the abdominal organs, although in the majority of cases, it is probably primarily limited to the stomach and colon.

But, however the condition may occur, the fact that in many cases it is the cause not only of distressing abdominal and pelvic pain as well as of grave constitutional disturbance, cannot be disputed. It has been rather a favorite declaration of anatomists and pathologists who deal only with dead people, to say that they often find these malpositions without any evidence that they have been the cause of mischief. We even sometimes hear surgeons who have much to do within the abdominal cavity making the same declaration. The one class of statement has about as little significance as the other. So far as post mortem conditions are concerned, it may be urged that pain, mental impairment, and metabolic disturbances are not demonstrated by the scalpel, and it would seem that ultimate chemical and morphologic changes incident to the condition that I am discussing, are a trifle elusive, even under the scrutiny of the microscope. Such gross changes as the Kramer-Jackson membrane went undiscovered, much less uninterpreted, until within the last few years. If abdominal surgeons will give more attention to the correction of these ptosic conditions and especially if they will learn how effectively and permanently to restore them, they will have fewer unsatisfactory results following many of their operations. This will be especially true in cases in which expected pathologic conditions are not revealed by exploration; cases, for example, in which ovaries are condemned on suspicion because they may be or may become cystic; or in which the appendix is removed in the absence of even the footprints of either present or past inflammation; or in which gastro-enterostomy is done for the drainage of a stomach when the impediment is some dozen or more feet down the sluice way.

The constitutional significance of the condition was effectively set forth by Glenard as far back as 1884. He clearly demonstrated the why and the how back of the fact that these displacements caused either one or both of two conditions. One of these conditions manifested chiefly by perturbations of the hepatic function, and tending toward and often resulting in cirrhosis of the liver, he called *hepatism*. The other condition, manifested chiefly by rheumatoid tendencies, gout, arterio-sclerosis and arthritic inflammations, he called *arthritism*. His classical work stands unimpeached. It has, in fact, been not only confirmed but elaborated, notably by Sir Arbuthnot Lane, who has shown the intimate relation between these displacements and various nutritional disturbances of the system resulting in distinct perturbations of metabolism. My own now rather ample experience confirms the conclusions of Lane. I am quite convinced that, with respect to many of the infectious diseases, including appendicitis, typhoid and tuberculosis, this ptosic state becomes a causative factor by lowering the resistance of the system. The toxaemic conditions induced by hyperabsorption from the retarded fecal current, is manifestly the cause of the lowered efficiency that, in fact, amounts to chronic invalidism.

It requires neither laboratory methods nor inductive reasoning to arrive at these conclusions. They are forced upon us by clinical proof. The curative surgical treatment, by the safe and perfectly painless method that I have exemplified in your presence today, is followed in the majority of instances by almost magical results.

I do not assert that all cases of ptosic stomach and colon can be cured by my procedure of retroperitoneal implantation. Some, a very few, should be short circuited; in a still fewer number of cases the colon should be removed. My recoveries, complete functional recoveries, following fixation, are better than eighty-five per cent. My failures, due to my failure properly to estimate the significance of chronic atrophic colitis resulting from chronic catharsis, is less than three per cent. My mortality due to the operation of implantation has been *nil;* I have, in fact, lost but two cases, one from intercurrent sepsis, orginating outside the field of operation, and the other from metastatic parotiditis developing near the conclusion of surgical convalescence. In neither instance does the mortality stand against the operation. My usual experience is that the alimentary canal, unkinked and un-

corked, often begins to functionate normally within a few days; the headaches and the mental depression disappear; the appetite, previously at a low ebb, becomes almost aggressive; nutrition improves, one of my patients gaining as much as sixty pounds in four months; general efficiency is restored, and, happily, the long wretched past is forgotten in the zest of new activities.

A FURTHER REPORT ON THE USE OF FASCIA IN PLASTIC MASTOID WORK.*

BY

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EL PASO, TEXAS.

Numerous operative methods have been advanced with the intention of securing quicker and better end results in mastoid work. In the January, 1915 issue of *The Laryngoscope,* the writer made a preliminary report on the subject. This article deals with a more extended usage of the method therein described.

Many experiments have been made, which clearly show that the mastoid cavity can be filled in successfully, either along with the the primary operation, or as secondary procedure.

Skin grafting is perhaps the most used of all methods as a plastic step, and it is in many cases a great help. Blood clotting is not to be depended upon, although excellent results have been obtained by some writers. Ballin[1] reports the successful transplantation of bone sections from the tibia to mastoid cavities, but this procedure is not practical. Iglauer[2] has transplanted portions of the temporal muscle to mastoid cavities with good results.

Numerous other experiments of like nature have been made, but with the exception of skin grafting, none of them are in general use. In young children and adults with small mastoid cavities, repair is usually rapid in acute cases, and deformity is not of much consequence, even though no plastic method be employed. But, where large cavities are met with, the process of healing is tedious, and the end results are often unsightly, when the wound is permitted to heal by the open method.

I have attempted to decrease these difficulties by filling the cavity with fascia, and then closing the mastoid wound. This has been done as a secondary step, some two weeks after the primary operation. At this time, healthy granulations have formed and infection is not so likely to occur as when done earlier. Fascia was used because it is a tissue of low organization, and can be transplanted with a greater degree of success than where higher organized tissue is used. Fascia is capable of great viability; when transplanted, through its own capillaries, it can sustain itself for days from nutriment in the surrounding tissue; it can be kept for a month or more in refrigeration and then be transplanted successfully, either as an autoplastic or as a homoplastic procedure. Fascia has a greater resisting power against infection than has most other tissue. Dr. J. S. Davis of the Johns Hopkins Hospital, reports an experiment where, in a dog, he tied the ends of a sawed femur together with fascia. Two weeks later the dog died of distemper. Examination of the sawed femur disclosed an infected wound, but the fascia was healthy and had grown firmly to the bone.

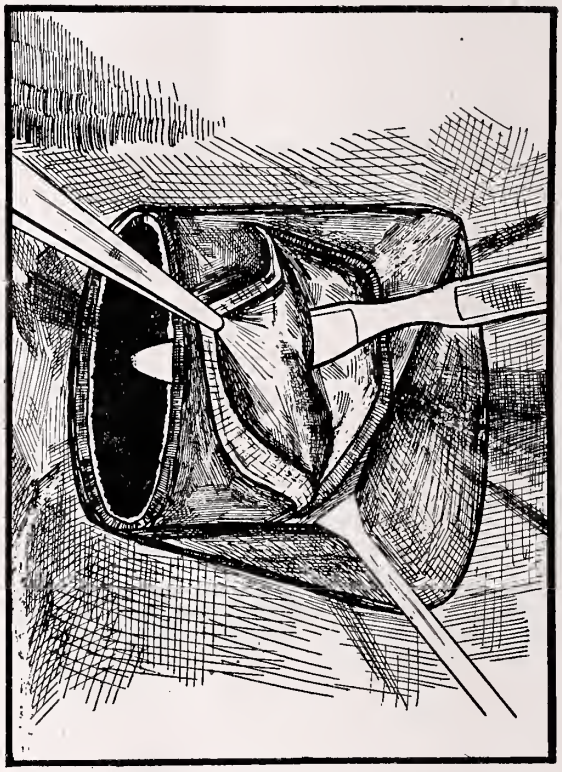

FIG. 1. Method of securing tissue to fill the mastoid cavity, by making a skin flap.

I obtained good results in a child with chronic mastoiditis, by filling the cavity, as a secondary operation, with tissue from the fascia lata. However, this tissue is rather difficult to secure and the procedure is not altogether practical. But, in acute and chronic cases, where the posterior wall is intact, the method should give more satisfactory results than are obtained by the process of blood clotting.

In a number of acute cases I have obtained excellent results by dissecting a pedicle flap from the tissue immediately behind the mastoid region, and by transposing the fascia and other tissue included, by the flap over into the large

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*Read before the Section on Opthalmology, Otology, Rhinology and Laryngology, State Medical Association of Texas, Fort Worth, May 4, 1915.

1. *Medical Record;* March 1st, 1913, page 372.
2. *Laryngoscope;* May, 1913, page 585.

cavity[3]. This flap may be secured, by first making a skin incision backward from the upper end of the mastoid opening; then, after dissecting the triangular piece of skin downward and backward, a curved incision is made through all tissue down to the bone, as shown in Fig. 1. This flap with its base is thoroughly loosened from the bone, the flap then turned under the base, and all tissue forcibly shoved over into the mastoid cavity, which has been prepared by irrigation with warm saline solution. The triangular flap of skin is then replaced and sutured in front to the freed anterior edge of the mastoid wound, and above to the upper edge of the incision. A close fitting dressing is used to retain all parts in place.

The fascia flap can also be secured, by making a parallel incision, one-fourth to one-half inch behind the posterior edge of the mastoid cavity. After dissecting the skin upward, backward and downward, a flap of fascia is dissected out, as shown in Fig. 2. The skin here remains attached to the base of the pedicle flap, and two lines of sutures are required to close up the mastoid wound and the parallel incision.

The size of the flap varies as to the thickness of the tissue and as to the amount of cavity

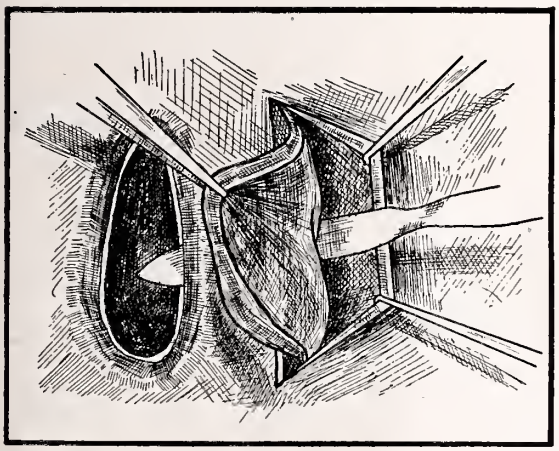

Fig. 2. Method of securing tissue to fill the mastoid cavity, by making a skin incision parallel to posterior edge of mastoid wound.

to be filled. The transposed tissue is well nourished and withstands infection more readily than does transplanted tissue. The depression caused from the transposed tissue is almost obliterated in a few weeks, through regenerative forces. Occasionally, a case is encountered where the retro-mastoid tissue is very thin, and difficulty is experienced in securing sufficient tissue to fill the cavity.

The transposed tissue undergoes some shrinkage, but not to a harmful degree. There are no important structures damaged in the field of operation. No inconvenience is experienced from the transposed muscle fibers and tendonous attachments included in the flap. The operation is not well adapted to chronic cases where the posterior wall has been removed, as obliteration of the external canal might pos-

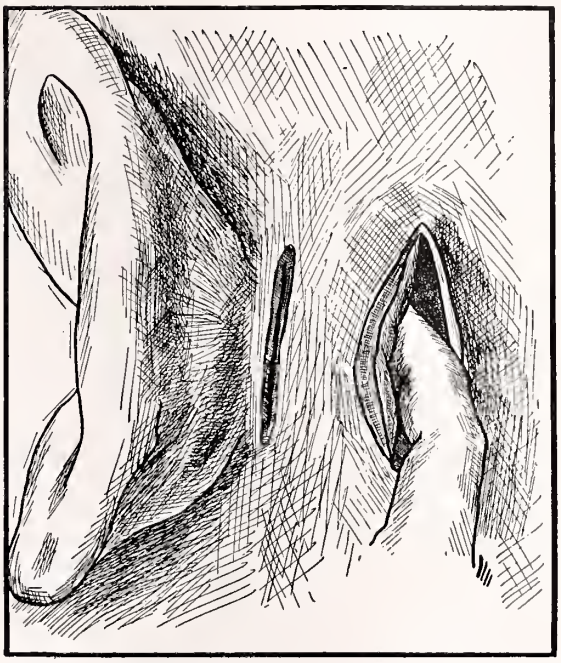

Fig. 3. Tissue flap turned under base and shoved over into the mastoid cavity.

sibly occur by adhesion of the tissue to the anterior wall. However, in exceptionally large cavities there is a possible field of usefulness for this procedure in chronic cases, along with the primary operation. This operation can be used to advantage in most all acute cases, but its practical advantage is in connection with large cavities. In this class of cases, where a sufficient amount of material can be readily obtained, and where used as a secondary operation, the results have been uniformly successful[4].

ABSTRACT OF DISCUSSION.

Dr. John H. Foster, Houston, said: No doubt all of us have wished for some method of closing the very large openings made in some mastoid operations. I have read Dr. Carpenter's article in the Laryngoscope and been tempted to try it, but it was not entirely clear to me in all details. I am glad to have heard him today as it makes the method very much clearer. These large depressed scars are not only unsightly, but they are usually very tender and hard to keep clean and any plan that overcomes this defect is certainly worthy of trial.

3. *Laryngoscope;* January, 1914.

4. *Annals of Surgery;* transplantation of tissue, Lexer, 1914.

IMPORTANT SYMPTOMS WHICH REQUIRE LABYRINTHINE OPERATION, WITH REPORTS OF CASES.*

BY

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FORT WORTH, TEXAS.

Our knowledge of labyrinthine suppuration today has revolutionized otology. No one should attempt to practice otology without first thoroughly familiarizing himself with the anatomy of the inner ear and the position of the horizontal semicircular canals, and who is not able to diagnose a non-acoustic labyrinth, as outlined by Doctor Barony and others.

Recently gained knowledge of the physiology of the non-acoustic labyrinth, and the exact methods of diagnosis which have been developed, make possible an exact diagnosis in practically all cases of labyrinthine disease. The classical symptoms are: (1) Deafness, of sudden onset; (2) vertigo, with nausea and vomiting; (3) spontaneous rotatory nystagmus, toward the sound side; (4) disturbance of equilibrium; (5) negative caloric reaction; (6) diminished or negative reaction to turning test; (7) galvanism negative.

Deafness is a strong symptom of acute labyrinthine disease; it may be a diffused serous labyrinthitis. In the suppurative form of labyrinthitis, the deafness is complete and permanent, while in some other forms a slight remnant of hearing may be left. One should not fail to operate a labyrinth which is suppurative. The mortality is above 70 per cent. Neither should a labyrinth with any remains of hearing be removed. A three meter speaking tube is one of the best means to determine the presence of hearing, used with the lately invented noise apparatus. In some cases the tube used alone conveys the wave sound to the good ear, but with the combined speaking tube and Doctor Barony's noise apparatus, this is not the case.

Sudden deafness indicates labyrinthine disease, especially when preceded by suppuration.

Vertigo, with vomiting, is pronounced in the onset, but may be brought on at any time by a quick movement of the head. We have a vestibular and a central vertigo. The vestibular is characterized by subjective phenomena; patient feels as if surrounding objects were moving in a circle. When the left side is involved, the patient feels like falling to the right when the eyes are open, but to the left when the eyes are closed.

Spontaneous rotatory nystagmus toward the sound side is very pronounced in the outset, but gradually disappears to some extent in most cases; in some cases it does not disappear at all.

Nystagmus is an overbalance of impulse from the opposite side.

Disturbance of equilibrium is more pronounced in the earlier stages of the disease. In many instances the patient is compelled to remain in a recumbent position. All the tests should be applied where a shadow of doubt exists.

Doctor Barony should have credit for negative caloric reaction. Cold water produces nystagmus to the opposite side, which lasts for a few minutes; warm water produces the opposite effect. This is due to the disturbance of the endolymph by changing the temperature of the water. Changing the position of the head during these tests governs the character of nystagmus produced. The caloric test is the best quantitative test of a non-acoustic labyrinth. When this test is negative, unless there is an obstruction of the canal, one may be sure he has a non-acoustic labyrinth. Should there be present any of the many things likely to close the canal, other tests will have to relied upon.

The turning test is important. The patient is put in a turning chair and turned rapidly to the right, which causes a horizontal nystagmus; when stopped, it will be reversed. One can change the course of nystagmus by the different positions of the head, as in the caloric test, so one must keep these things in mind and have patient's head straight and in an upright position.

The subject of labyrinthitis is attracting a great deal of attention today, but greater attention should be paid to differential diagnosis. I say this for fear that some of us, in our enthusiasm to operate, may sacrifice an acoustic labyrinth. The history of each and every case should be gone into very carefully, and in case of doubt, consultation with the most competent practitioners should be sought.

There is a vast difference in a hyperemia of the labyrinth and suppuration of the labyrinth, as follows:

(Acoustic) Hyperemia of the Labyrinth.	(Non-Acoustic) Suppuration of the Labyrinth.
(1) Impairment of hearing increased.	(1) Absolute deafness.
(2) Tinnitus.	(2) No tinnitus.
(3) Moderate vertigo aggravated in recumbent position.	(3) Intense vertigo, diminished or relieved in recumbent position.
(4) Spontaneous nystagmus to both sides, but more marked to the diseased side.	(4) Acute stages, nystagmus to the well side; later it may be to both sides,

*Read before the Section on Ophthalmology, Otology, Rhinology and Laryngology, State Medical Association of Texas, Fort Worth, May 4, 1915.

	but always more marked to the well side.
(5) Irritability of labyrinth increased.	(5) Irritability of labyrinth negative.
(6) Disturbance of equilibrium not so pronounced as in suppuration of the labyrinth.	(6) Disturbance very pronounced in acute non-acoustic ears.
(7) Partial recovery of acoustic and static functions.	(7) Permanent loss of acoustic and all functions.

Secondary to middle ear suppuration, when there is a piece of bone not yet detached by working around in the ear with instruments, or in washing the detached bone may be forced against the membraneous labyrinth, thus causing the patient to experience sudden vertigo, with or without deafness.

The most common seat of suppuration is in the promontory of the horizontal semi-circular canal. This is caused by pressure from a cholesteatoma or tuberculosis.

In looking over a mass of literature, I was unable to find any two authors who agreed on the symptoms of cerebral abscesses; but one thing is apparent, in a large majority of cerebral abscesses we find a suppurative labyrinth. I would advise that the dura mater in the posterior fossa be exposed in every case of operation for suppurative labyrinthitis.

REPORTS OF CASES.

Case 1.—The patient's right ear had been discharging for eighteen or twenty years, as the result of scarlet fever. The discharge had been continuous and he had been treated for the trouble several years. During the eight or ten weeks previous to operation, he suffered with profuse headaches and had completely lost his hearing. He had some stiffness of the neck and felt prostrated all the time, but experienced no vertigo. He was suddenly taken with a severe attack of vertigo, which lasted some six or eight days. Everything looked dark before him. He was nauseated and vomited a great deal, and was compelled to lie down all of the time. He had a little fever but no chill. After he grew a little better he came to see me about his hearing.

I found him well nourished. He complained of some pain and stiffness of the neck, and there was a thick, greenish discharge from the right ear which was very offensive. Their was also a sagging of the superior posterior wall of the canal. Some small particles, which hung down in the orifice, obstructed my view. On pressing the mastoid process slightly I found it tender, as was all that side of the head.

The microscope showed fat cells streptococcus mucosa and crystals of cholesteatoma.

Ophthalmic examination showed both discs three diopters.

Functional examination showed the left ear acoustic and the right ear non-acoustic.

Rhomberg examination positive. Hopping very uncertain. Falls when eyes are closed. Caloric test positive.

I made the same incision as for a mastoid, baring the mastoid region, and doing a simple mastoid operation. I found the bone ebonized and the mastoid cavity filled with a cholesteatoma mass. Nature had removed all the cells. I found that the promontory of the horizontal semicircular canal contained a fistula about 2 or 2½ mm by 5 mm. I then converted my simple mastoid into a radical, enlarging my wound, and removed the mastoid process and the inner table of the middle and posterior fossae.

The sinus looked normal; there was no granulation on the dura. The semicircular canals were removed, the posterior first, the superior next and the horizontal last. Following it down in its course, under the facial ridge, I then broke down the cochlea and completed my tunnel under the facial ridge, connecting the two openings and establishing thorough drainage. The dura and sinus were left intact.

Immediately after the operation there was a slight facial paralysis of the seventh nerve, which soon passed away. The dressing was changed on the fourth day.

The first day after the operation the temperature was 99 degrees, pulse 78. This was the highest temperature found at any time. On the sixth day the patient sat up in a chair, and on the eighth day walked around. On the tenth day he went home. In six weeks he was free from all symptoms.

Case 2.—Male, age 48; occupation, farmer. Operated February 15th, 1915. Three years previous to operation there was a discharge from the left ear for some months, which had healed, leaving the hearing poor. There had been no discharge for one year. Two years ago a windmill fell and struck him on base of the skull and neck. He was confined to his bed three months, during which time he complained of pain in the head. Fifteen months ago he had an attack of la grippe, which lasted for three months. There was suppuration in the left ear and pain in the neck and head. From this time he lost all hearing in the left ear. The discharge ceased, but there remained pain and tenderness on the left side of the head, over the mastoid region. For the past five months there had been swimming of head and he staggered to the right side.

Rhomberg symptoms prominent, together with all the symptoms in case one. The canal in the superior posterior part was sagging, with a perforated drum membrane. Wassermann reaction negative.

I advised a labyrinth operation. The mastoid was opened in the regular way and a number of small polypi were found in the antrum, and upon opening the cochlea I found a mass of granulation tissue. In the third turn of the cochlea, the oval and round windows were full of the same material. I then made an examination of the horizontal semicircular canal and found a small opening 2 mm by 4½ mm.

I completely obliterated the labyrinth, as before described. The patient had a slight paralysis of the seventh nerve the next morning. He had very little rise in temperature or pulse. The wound was dressed for the first time on the fourth day. The patient sat up the seventh, went out of doors the tenth day and went to a nearby town in a jitney on the same day.

ABSTRACT OF DISCUSSION.

Dr. E. R. Carpenter, El Paso, said: I do not put much faith in the galvanic test. Nystagmus depends on the direction in which the patient is turned. I have not had many labyrinth cases, but I would not be too hasty in operating upon them. I have never done the operation in my private practice, but would call your attention to the necessity of not overlooking any of the details of the examination as outlined by Dr. Head.

TWO CASES OF LABYRINTH DISEASE WITH OPERATION.*

BY

JOHN H. FOSTER, A. M., M. D.,

HOUSTON, TEXAS.

It is not the purpose of this paper to enter into an academic discussion of labyrinthitis and its various forms, of the functional tests for the same, of the indications for operative interference, or of the merits of the operative technique advocated by Hinsberg, Neumann or Richards. So much attention has been given by otologists in recent years to this formerly obscure subject that these matters are familiar to all who are conversant with modern otological literature. It is my purpose simply to present for your consideration the histories of two entirely different cases, that seem to have points of sufficient interest to justify reporting.

Case 1.—Miss M. E. C. The first consultation was in March, 1910, for discharge from, and discomfort in, the right ear. In June, 1907, she had diphtheria, and following this attack had throat trouble and discomfort in the left ear. In September, 1907, she had a severe attack of middle ear inflammation in the left ear, with mastoid involvement. A simple mastoid operation was performed, also a tonsilotomy. The mastoid wound healed promptly and the ear became dry, but in a few weeks both ears discharged and she had repeated attacks until February, 1908, when a simple mastoid operation was performed on the right side. Soon after this the left ear became dry, but the right continued to discharge. She came to Texas in October, 1909. The right ear seemed to be in better condition at times, but at no time became dry.

Examination: Both mastoids showed scars of healed operative wounds. Both membranae tympani were largely gone. The left ear was dry. The right ear had a profuse mucopurulent discharge, with thickened mucous membrane in the middle ear.

Treatment of the middle ear was instituted and in a short time the ear was almost dry. In June, 1910, while I was away from the city, both ears began to discharge and the patient had a severe attack with great pain in the left ear. There seemed to have been some symptoms pointing to intracranial involvement and she was confined to bed for a time. An operation was contemplated, but was deferred, and the patient improved.

Upon my return in July, I found both ears discharging freely. Treatment of the left ear was extremely difficult on account of the fact that the slightest manipulation or the introduction of any medicament into the ear, would produce pain and marked symptoms of labyrinth irritation. Both ears improved somewhat, but neither became dry, and the left ear at times caused a great deal of pain and discomfort.

In September a radical operation on the left side was decided upon and performed. The patient got along nicely for five days, at the end of which time the packing was removed and a very light packing replaced. The next day she complained of great pain along the course of the facial nerve and twitching of the muscles of the face. A paresis of the facial followed. This was never complete and cleared up in two weeks. Vertigo, nystagmus and nausea, were also present, showing irritation of the labyrinth. These symptoms were slower in clearing up than the facial paresis, and for some time the patient was very uncertain in her gait, tending to stagger to the right. The wound healed promptly, except for some granulations about the location of the oval and round windows. Epidermization could not be secured there, though curettage and cauterization were tried.

She suffered from several recurrences of attacks of facial neuritis and labyrinth irritation, but these were transient until July, 1911, when the vertigo and ataxia became almost constant. This continued in spite of curettage and cauterization. Tests showed almost complete loss of hearing in the left ear, and so, after mature deliberation, it was decided to exenterate the labyrinth.

Accordingly, on November 16, 1911, the labyrinth operation was performed. The technique of Richards was followed and no trouble was encountered in carrying out the various steps. Granulations were found along the exposed facial nerve and pushing into the vestibule.

The patient made an uninterrupted recovery, with not even a transient facial paralysis. At first there was considerable disturbance of equilibrium, but gradually this was overcome, and now she is an accomplished dancer and experiences no trouble in turning in either direction.

Case 2.—This little girl, Alice Mc P., was first seen by me in June, 1912, when she was brought to me on account of complete atresia of the naso-pharynx. She was operated on and a good opening made. This was kept open by means of a splint made of dental rubber, and in time a good result obtained.

The patient then disappeared from my observation until January 8, 1915, when she was brought in with the following history: About October 1, 1914, she had a severe cold and both ears began to discharge. The left ear got well in three weeks, but the right ear con-

*Read before the Section on Ophthalmology, Otology, Rhinology and Laryngology, State Medical Association of Texas, Fort Worth, May 4, 1915.

tinued to discharge. She had a hard chill and an infection was discovered near the anus. This was incised and drained, but did not get well until the whole lower end of the rectum had sloughed away. About December 25, the right side of the face became paralyzed and remained so. She suffered a great deal from pain in the head.

Examination: The left ear was dry and the membrane healed. The right external auditory canal was filled with foul pus and polypoid granulations coming from the middle ear; the mastoid was tender. Functional tests showed complete absence of response by the right cochlea and static labyrinth. The patient was sent to the hospital and prepared at once for operation.

Operation: The mastoid cortex was removed and the whole process found involved and largely broken down. The cells were all cleaned out and the middle ear entered. Tough granulation tissue filled this cavity. This tissue was curetted away and the outer wall of the cochlea found necrotic. A large part of the cochlea came away as a sequestrum. The labyrinth was filled with granulations. These were removed and the diseased bone followed until the petrous portion of the temporal bone was shelled out almost to the tip. A collection of pus between the bone and the dura of the cerebellum was discovered and evacuated. The part of the facial nerve that passed through the middle ear was completely destroyed by the disease. The wound was cleansed and dressed and the patient made a speedy and uninterrupted recovery without even a post-operative rise of temperature.

It is needless to say that the facial paralysis remains. We contemplate doing a nerve anastomosis at an early date, to try to remedy this.

ABSTRACT OF DISCUSSION.

Dr. E. L. Burton, McKinney, said: I think it best to operate very little in these cases.

Dr. Joseph Beck, Chicago, said: I think the death rate in these cases is very high and we should not wait when facial paralysis is present, but should operate at once. If the patient has persistent irritation of the nerves, an operation is necessary to completely clean out the field.

Dr. Foster, closing, said: I feel sure that no one wants to rush into labyrinth operations, but there are occasions when they should be done, and then we should do them and not dread.

Micajah's Uterine Wafers and Piso's Tablet's. The A. M. A. Chemical Laboratory has determined that Micajah's Uterine Wafers and Piso's Tablets are practically identical—a mixture of dried alum, borax and boric acid. While Micajah's Uterine Wafers are advertised to the medical profession Piso's Tablets are a "patent medicine." The claims made to the public for Piso's Tablets are silly and mischievous—but no more so than those made to the medical profession for Micajah's Uterine Wafers. (*Jour. A. M. A.*, Sept. 25, 1915.)

DEPARTMENT OF EXTENSION

[The little articles below on appendicitis and hernia are intended to be handed by the physician to his patient. Their purpose is to teach the patient what he ought to know about the cause, prevention and cure of these surgical diseases. About all the patient needs to know about their cure, or, at least, all that he is able to comprehend, is to rely implicitly on his medical adviser.

In this day of specialism, there is an appreciable gap between the people and the specialist. In medicine and surgery, for instance, the patient sometimes finds it hard to understand why a certain operation is necessary. The average young mechanic with hernia is usually unaware of the inevitable progress which the disease will make as the years pass. After he learns how the hernial sac becomes constantly larger, operation may seem more conservative than the expectant treatment. The patient with hernia ought to know, also, the dangers of going into regions remote from surgical skill, as on camping trips, and the like.

Dr. J. N. McCormack once spoke of the great number of hernia victims, who, unaware of the benefits of surgery, submit themselves to the treatment of hernia quacks, and remarked that they might as well wear an iron ring around the neck as a truss around the body. In order to meet this and similar situations, we are publishing this series of articles, one or two each month, for distribution by the physician to his patient. Any reputable practitioner is at liberty to reprint these articles. For the benefit of those who desire only a few of the reprints, we have a small number which will be sent to those sending postage.]

APPENDICITIS.

Because it has no apparent usefulness to the body, the vermiform appendix is called a vestigial, or rudimentary, organ. The average appedix is of the diameter of an ordinary lead pencil, and about four inches long. Its wall is formed of several layers, arranged like the layers of the intestinal wall, for the appendix is in reality a continuation of the blind end of the large intestine. Both the large and the small intestine are constructed in such a manner that the food is delayed in its passage, thus allowing more complete digestion and absorption. One of the peculiarities of the intestinal canal is that the small intestine, instead of joining end to end with the large intestine, empties into the side of the latter about a handsbreadth from its end, leaving a blind end or cul-de-sac. The walls of the appendix are a continuation of the walls of this cul-de-sac; the space inside the appendix communicates with the space inside the cul-de-sac; and, in fact, the appendix may be looked on as a portion of this blind end of tne large bowel, shrunken through disuse.

The appendix usually, but not always, lies in the lower abdomen on the right side. The blood supply of the appendix passes into it near the attached end, as far as possible from the free end, or tip. This arrangement of the blood vessels is probably responsible for the frequency of gangrenous appendicitis. When irritating contents cause the neck of the appendix to swell, the blood supply is cut off from all that part of the organ lying towards the tip, and gangrene frequently results. The appendix might be compared to a finger within a tight ring; at the first swelling, the circulation is partially obstructed; this in turn leads to more swelling, which may eventually stop all circulation and cause gangrene. Gangrene is mortification or death of a part. When appendicitis develops suddenly, it is

called acute appendicitis, and this may result in gangrene in less than forty-eight hours.

The pain of appendicitis is due to the spasm of the muscular layer of its wall. The pain is not always felt in the region of the appendix; it is a common occurrence for patients to feel pain near the navel, when the appendix is really at fault. The interpretation of any pain in the abdomen therefore requires discriminating judgment.

If the appendix becomes gangrenous, certain spots give way, and allow the contents of the appendix to leak into the abdominal cavity. This, of course, subjects the patient to grave danger from appendiceal abscess and peritonitis.

Without being acutely inflamed, the appendix may nevertheless interfere seriously with the digestion. It is not best to enumerate here the various symptoms of indigestion due to appendicitis, since only a competent physician can recognize the disorder. Suffice it to say that the symptoms of chronic appendicitis may seem to proceed from some region far away from the appendix. It requires the skill and judgment of a well-qualified physician or surgeon to decide in any given case whether appendicitis is present or not.

It is impossible to discuss in an article like this the question of when to operate. In general, it may be said that the appendicitis operation is far less dangerous than it formerly was, but that the only solution of the problem is to select medical or surgical advisers of intelligence and reliability and follow their advice. The advice of neighbors or other untrained persons is usually valueless. All fads and novel treatments should be avoided.

Those who have an appendix that has been inflamed will find it best to avoid jolting exercises, such as riding horseback, or riding in a vehicle over rough roads. The influence of food does not seem to be very important, although food containing rough, woody fibres or other irritating material should be avoided. One should therefore avoid eating peanuts, popcorn, nuts, corn or fruits containing seeds. Infected meats may be a factor in the causation of the disease. In these matters the physician in charge can often give advice fitted to the particular case.

CAUSATION AND RESULTS OF HERNIA.

An ordinary rupture or hernia, is an opening in the muscular layer of the abdominal wall, which allows the organs from inside to protrude and lie immediately beneath the skin. Such an opening usually occurs at a weak point in the body wall, as for instance where the spermatic cord emerges near the groin. If the natural opening does not fit closely and snugly around the cord, a loop of intestine may press down alongside the cord and act as a wedge, enlarging the natural opening, until finally a window exists in the body-wall, and the intestines can come out and lie immediately underneath the skin. The intestines of course should lie safely inclosed by the deeper muscular layer of the body-wall as well as by the skin.

Hernias may occur in or near the groin, at the navel, behind the hip, and at other situations. Anything which weakens the body-wall or anything that increases the pressure within the abdomen, tends to cause a hernia; for instance, injuries to body-wall, heavy lifting, straining at stool, coughing, corpulence, or accumulation of fluid in the abdomen.

Once such a hernia exists, the pressure within the abdomen tends constantly and continually to force more and more of the intestines out through the opening. The bulging almost always grows larger as time goes on. The muscular wall which surrounds the opening may contract at any time and exert a pinching pressure on the intestines passing out. This pressure is often severe enough to cause gangrene of the intestines, fatal unless relieved promptly by operation. Even though a truss is worn, the hernia may some day become pinched, or "strangulated," as it is called. No person having hernia should ever remain in a neighborhood where a good hospital and surgical skill are not available. Ruptured persons going camping, for instance, may suffer a strangulation and die before they can be got to a hospital. In the early stages, before the hernia has gotten too large, surgical operation usually gives perfect relief. Ruptured persons who wish to lead an active life should consult a surgeon of known skill and integrity without delay, since the hernia almost always becomes larger with time.

The U. S. Government has not quite eliminated the hernia quacks, who advertise their claims in the newspapers and through the mails. It is very dangerous to tamper with men of this class, as they have not the restraining influence which comes from living in a community where one has a reputation to maintain.

EL PASO COUNTY HOSPITAL.

The grounds are situated outside the corporate limits of the City of El Paso. The plat is rectangular in form and comprises 6 acres in area; it lies north of the main county paved road and approximately 700 yards east of the present city limits, fronting south 460 feet on the county road. The

El Paso County Hospital.

building is located approximately in the center and 100 feet from the property line. The grade of the ground is about 20 inches below the paved roadway, and for proper drainage must be raised. The approach to the building is by an eliptic arc from both sides and a broad walk from the center.

Tuberculosis Cottages.

The building is constructed with reinforced concrete, brick, steel and iron, and is fire-proof with the exception of doors, windows, stair and roof supports. The roof is covered with metal tile and the floors are of cement; the basement floor is four feet below the established grade.

The basement contains two ward rooms, each having 11,411 cubic feet of air area, toilet and bath for each ward. The north wing subdivides for boiler and furnace room, laundry, toilet and bath, service help, four rooms for insane patients, bath and toilet for each sex, opening on halls. There is hall communication in east and west sides, to enclosed yards, for their use. The south wing contains three rooms and all are fitted with steam and gas connections for food service, two large linen closets and nurse's closet.

The first or main floor has east and west wings, subdivided into nine individual rooms and one toilet and bath from the hall, for each side. Each room has approximately 875 cubic feet of air area built-in wardrobes and a window area of 28 square feet. The north wing contains the kitchen, storeroom and two galleries to same. The east side connects with the ground by steps, and has pass pantry, pantry sink, cupboard, etc., a dining room and two communicating rooms, connected with bath or accessible from the hall for the superintendent, office and 4 feet 6 inches stair and hall to the basement, and second floor, large gallery in front with wide concrete steps, two large linen closets and nurse's closet.

The second floor contains two large wards as described for the basement. The north wing subdivides for operating room, 19 feet 6 inches by 16 feet, six large windows, operating sink and open air traps for hose flushing, sterilizing room, pharmacy, dressing room and bath, dark room and four nurses rooms, large front gallery, two linen closets and nurse's closet.

The building is equipped with the best sterilizers, operated with high pressure steam from a marine boiler with ample capacity to operate serving tables in service room on each floor and kitchen, or all can be operated with gas. The heat supply is furnished by low pressure steam from sectional boiler. Hot water is supplied by water heater through tank and circulating system. Electric wiring throughout for lighting and electric fixtures for all, telephone wires, call and recall annunciator service installed under the contract. The walls and ceilings are painted with washable paint. The building is very substantial and the cost, including architect's fee and clerk of the works, was $29,000.50. This cost does not include connections with city sewerage, water and gas.

MISCELLANEOUS

MEETING OF MEDICAL ASSOCIATION OF THE SOUTHWEST.

The tenth annual meeting of the Medical Association of the Southwest was held in Oklahoma City, Oklahoma, October 11-13. The day preceding the regular program was devoted to and known as Clinic Day. This was a new feature of the Association's work, and its success was proven by the attendance, which went over the two-hundred mark. The feature of the day was a bone clinic by Dr. John B. Murphy. A number of interesting cases presented themselves for diagnosis, and received attention from Dr. Murphy, who made a talk on each case. He made it plain that cases of osteomyelitis must be given relief within seventy-two hours of the onset of the disease, if the patient is to have the best opportunity for relief. A clinic was held by Dr. Albee of New York on Wednesday, in which he demonstrated the bone splint in plastic surgery.

The regular scientific program was as follows: *The Early Pathological Changes in Tuberculosis; Their Relation to Physical Signs and Clinical Symptoms*, Dr. F. M. Pottenger, Monrovia, Calif.; *The Bone Graft in Plastic Surgery* (illustrated by stereopticon slides), Dr. Fred H. Albee, New York; *Roentgenology in Gastro-Intestinal Diagnosis*, Dr. E. H. Skinner, Kansas City; *Differential Diagnosis, Between Gastric Ulcer, Gall Stones and Diffuse Gastritis*, Dr. W. T. Grove, Eureka, Kas.; *Notes on European Clinics Visited During 1915*, Dr. J. E. Gilcreest, Gainesville, Texas; *Use of Heat in the Treatment of Carcinoma*, Dr. C. C. Nesselrode, Kansas City, Kan.; *Anesthetics*, Dr. John R. Worley, Dallas; *Primary Sarcoma of the Large Intestines*, Dr. C. A. Potter, St. Joseph, Mo.; *Psychic and Somatic Palsies of Pregnancy*, Dr. S. G. Burnett, Kansas City; *Diagnosis and Treatment of Gastric Duodenitis*, Dr. E. B. Irwin, Wellston, Okla.; *Some Spastic Conditions of the Colon*, Dr. F. W. Froehling, Kansas City, Mo.; *Diagnosis of Gastric and Duodenal Ulcer*, Dr. H. G. Walcott, Dallas; *Nervous Disturbances Due to Pelvic Disorders*, Dr. G. H. Moody, San Antonio; *An Appreciation of the Value of Nitreous-Oxide, Oxygen Analgesia in Obstetrics, From an Experience of Twenty-five Cases*, Dr. F. K. Camp, Oklahoma City; *Fractures Nearby or Implicating the Joints and Joint Infections* (illustrated), Dr. John B. Murphy, Chicago; *Scientific Union and Its Relation to Morality*, Dr. C. S. Pettus, Little Rock; *Pelvic Mechano-Therapy*, Dr. Frances Harper, Pittsburg, Kas.; *Caudal Anesthesia*, Dr. Bartels, St. Louis; *Treatment of Hare Lip and Cleft Palate* (illustrated), Dr. G. I. V. Brown, Milwaukee, Wis.; *Intestinal Tumors*, Dr. A. B. Small, Dallas; *Naevus*, Dr. J. L. McDermott, Kansas City, Mo.; *Prostatectomy*, Dr. Clarence Cappell, Kansas City; *The Treatment and Prevention of Deformities*, Dr. B. Belove, Kansas City; *Can Early Diagnosis of Tuberculosis Be Made?* Dr. S. J. Wolferman, Fort Smith, Ark.; *The Treatment of Tuberculosis With Tuberculin*, Dr. Frank Ridge, Kansas City; *What Are We Doing, and What Should We Do for the Feeble-Minded?* Dr. W. W. Kendall, Superintendent State Institution for Deficient Children, Enid, Okla.; *The Glands of Internal Secretion and Their Relationship to Clinical Medicine*, Dr. W. W. Duke, Kansas City, Mo.; *Eugenics*, Dr. W. T. Wilson, Navasota, Texas; *What Our Patients Swallow*, Dr. S. H. Landrum, Altus, Okla.; *Treatment of Gonorrheal Ophthalmia*, Dr. H. Gifford, Omaha, Neb.; *Trachoma*, Drs. Peter C. and Daniel W. White, Tulsa, Okla.; *The Eustachian Tube*, Dr. L. H. Sarchet, Wellington, Kas.; *Nasal Irritation and Ocular Disturbances*, Dr. E. H. Cary, Dallas; *Operation on the Frontal Sinus*, Dr. R. H. T. Mann, Texarkana; *Catarrhal Deafness*, Dr. W. E. Dixon, Oklahoma City; *Some Important Considerations in Cataract Extraction*, Dr. John O. McReynolds, Dallas; *Report of Case of Glaucoma*, Dr. E. B. Barker, Guthrie, Okla.; *Removal of the Tonsils in the Acute Inflammatory Stage*, Dr. T. L. Higginbotham, Liberal, Kas.; *Tracheo-Bronchoscopy and Esophagoscopy*, Dr. D. L. Shumate, Kansas City, Mo.; *Some Points in the Treatment of Deviations of the Nasal Septum*, Dr. Harold Bailey, Springfield, Mo.

A resolution was adopted approving the effort being made to establish a National Board of Medical Examiners, and pledging the support of the Association.

Clinic Day was made a permanent feature of the yearly program.

The Southwest Journal of Medicine and Surgery was continued as the official organ of the Association for another year.

Eighty-four new members were enrolled.

The following officers were elected: President, Dr. Joe Becton, Greenville, Texas; vice presidents, Dr. W. S. Sutton, Kansas City, Kas.; Dr. E. H.

Martin, Hot Springs, Ark.; Dr. J. A. Walker, Shawnee, Okla., and Dr. S. C. James, Kansas City, Mo.; executive commitee, Drs. J. D. Riddell, Sedalia, Kas.; St. Cloud Cooper, Fort Smith, Ark.; W. A. Ball, Wanette, Okla.; E. H. Skinner, Kansas City, Mo., and E. H. Cary, Dallas, Texas; secretary-treasurer, Dr. F. H. Clark, El Reno, Okla.

The following section officers were elected: *Surgery*, Dr. E. H. Skinner, Kansas City, Mo., chairman; Dr. W. J. Jolly, Oklahoma City, vice chairman; Dr. A. B. Small, Dallas, secretary; *Internal Medicine*, Dr. M. M. Smith, Dallas, chairman; Dr. J. W. Duke, Guthrie, Okla., vice chairman; Dr. S. J. Wolferman, Fort Smith, Ark., secretary; *Eye, Ear, Nose and Throat*, Dr. M. F. Jarrett, Fort Scott, Kas., chairman; Dr. G. E. Gwinn, San Antonio, vice chairman; Dr. D. L. Shumate, Kansas City, Mo., secretary.

The next meeting will be held at Fort Smith, Ark.

RELICS OF TEXAS MEDICAL HISTORY.

Dear Doctor: It was not until I began to search for records concerning the pioneers of medicine in Texas that I found how very scanty these were. The human side was often buried with the men who could tell interesting stories of their contemporaries, and their portraits had first been relegated to the spare bedroom by descendants and finally disappeared with the sale of furniture.

I would urge every county medical society to gather letters, pamphlets, books, pictures or photos of men and places, old instruments, etc., as the foundation of a Medical History Museum. The splendid museum in England, founded and enriched by Mr. Burroughs Wellcome and given to London is, the curator told me, poor only in one respect, *i. e.*, the American section is not what it should be with regard to instruments, books, etc., although his helpers went far and wide in the United States, gathering what they could.

If any of the Texas physicians have things of interest they would give or sell, or in the case of pictures, to copy, I would gladly be a zealous custodian on behalf of El Paso and promptly return any pictures lent.

I am gathering material for an hour's illustrated talk to my colleagues here, in order to inspire them to gather those things which will be so interesting to the profession in the future.

Faithfully yours,

Hugh W. Crouse.

El Paso, Texas, October 20, 1915.

THE TRI-STATE MEDICAL SOCIETY TO MEET IN MARSHALL.

Dear Doctor: The Tri-State Medical Society, of Arkansas, Louisiana and Texas, will hold its twelfth annual meeting at Marshall, Texas, December 14 and 15, 1915.

The program is better than ever before, and the attendance bids fair to outrival all previous meetings.

In addition to the usual scientific program, added interest and unusually good papers will be the result of the offer of three gold medals for the three best papers on original work performed by doctors from either of the three States embraced in the Society. The first medal is offered by the Society, the other two by Drs. Dowling and Mann.

The customary social entertainments, informal in character, will be provided by the local fraternity.

Fraternally yours,

W. G. Hartt, President.

J. M. Bodenheimer, Secretary.

November 15, 1915.

FROM THE FRATERNAL DELEGATE TO COLORADO.

Dear Doctor: I wish to express the pleasure given me in the distinguished honor of representing the State Medical Association of Texas as Fraternal Delegate during the annual meeting of the State Medical Association of Colorado, in Denver, October 5, 6 and 7. I reached Denver on the morning of the 5th and proceeded directly to the Albany Hotel, the meeting place of said Association. After breakfasting, I proceeded to the desk of the secretary, presented my credentials and registered as Fraternal Delegate from Texas.

About 9 o'clock the Association was called to order by President Dr. G. B. Packard of Denver. Without any preliminaries, the attending members plunged into the work before them, which was exceedingly interesting and very instructive. The reading and discussion of papers continued until noon, when adjournment was taken for luncheon. They again assembled at 2 o'clock, when the president delivered his annual address, which was very enthusiastically received.

During the afternoon the president suspended the reading of a paper long enough to introduce me to the Association as Fraternal Delegate. I did not respond with any oratorical display, but expressed my appreciation of the honor conferred. I had conjured up in my mind a very appropriate speech, I thought, but at the time of the introduction I was a little like the girl when the fellow asked her to marry him, it was so sudden, and I thought I might have an opportunity later to express myself; but the scientific session continued without intermission right up to the very minute of adjournment, and I still have my address locked in my palpitating breast.

I never attended a medical meeting that was more earnest and studious in every way. There were forty-four papers on the program, and only about three were omitted by reason of the absence of the essayists. It seemed to me that every contributor felt it his duty to be there on time with his paper, and those appointed to open the discussions were there, also, and every paper was well discussed.

There were three distinguished visiting physicians (besides myself). Dr. William T. Councilman of Boston, Mass., delivered an illustrated lecture on *An Anatomical Consideration of Certain Tumors of the Brain*, which was most excellent. Dr. J. L. Yates of Milwaukee, Wis., read a paper on *The Etiology, Pathology and Therapy of Hodgkin's Disease and Allied Affections*, with lantern slides, which was well received and discussed. Dr. E. C. Rich, Fraternal Delegate from Utah, read a paper on *The Mortality in Abdominal Surgery*.

I mention the visitors to show how courteous and attentive the profession was toward physicians from other States. There were other papers read of equal interest.

I attended every session, heard every paper read and discussed, and I can say I have never yet attended a meeting of this sort in which there was more interest and enthusiasm demonstrated than on this occasion. The profession of Colorado seems to me to be unusually harmonious and exhibited a fraternal spirit seldom seen. I did not see a single physician that I thought was in any way under the influence of intoxicants; it occurred to me that every member in attendance was there especially for business and to get all the good possible out of the work. There were about five hundred members registered. The social features were fine; everything possible was done to make all present enjoy themselves, especially the ladies.

I met personally a great number of the members, and expressed the hope that some of them, at least, would visit our meeting at Galveston next May.

Again thanking the president, as well as the profession of the State, for this distinguished honor, and hoping that my conduct will meet the approbation of all concerned, I beg to remain,

Fraternally yours,
E. A. Johnston.

Amarillo, Texas, October 21, 1915.

MORE CONTRIBUTIONS FROM THE SEALYS.

Dear Doctor: At a meeting of the Board of Regents of the University of Texas this week, the information was given out that Mr. John Sealy of Galveston was expending approximately $100,000 in repairing and improving John Sealy Hospital at Galveston, which institution, as you well know, is a very valuable adjunct to the Medical Department of the University of Texas.

The Board feels that the medical profession of Texas should know something of the valuable service that Mr. Sealy and his sister have rendered to the Medical Department of the State University. In fact, without the assistance of the Sealys, it would have been well-nigh impossible for the University of Texas to have maintained its Medical Department, and it is nothing more than fair that the citizenship of Texas in general and the medical profession in particular, should give due recognition to the Sealys for their undying loyalty to our State Medical School. Very sincerely yours,

Geo. S. McReynolds.

Temple, Texas, October 29, 1915.

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1915, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies:"

Pantopon (Pantopium hydrochloricum).—A mixture of the hydrochlorides of the alkaloids of opium, containing 50 per cent. of anhydrous morphine hydrochloride. It produces essentially the effects of opium, but, being devoid of opium extractives, may be used for hypodermic administration. It is probably absorbed more promptly and is free from the nauseant odor and taste of ordinary opium preparations. Pantopon (pantopium hydrochloricum) is also supplied as Pantopon (pantopium hydrochloricum) tablets 0.01 Gm., Pantopon (pantopium hydrochloricum) hypodermic tablets 0.02 Gm., and Pantopon (pantopium hydrochloricum) ampules 0.02 Gm. The Hoffmann-LaRoche Chemical Works, New York City. (*Jour. A. M. A.*, Sept. 4, 1915.)

Larosan, Roche.—Calcium caseinate, containing calcium equivalent to 2.5 per cent. calcium oxide. In the treatment of diarrheas of infants a useful food is that made from the curd of milk and diluted buttermilk. The preparation of such a mixture of proper composition being difficult to prepare in a private home, Larosan, Roche is offered as a substitute. The Hoffmann-LaRoche Chemical Works, New York City. (*Jour. A. M. A.*, Sept. 4, 1915.)

Betanaphthol Benzoate - Merck.—A non-proprietary preparation of betanaphthol benzoate (see New and Nonofficial Remedies, 1915, p. 210). Merck & Co., New York. (*Jour. A. M. A.*, Sept. 4, 1915.)

Desiccated Pineal Gland, Armour.—The pineal gland of normal cattle, freed from connective and other tissues, dried and powdered. There is some evidence that there is a relation between the pineal gland and some processes of development and growth. The therapeutic use of the gland is in the experimental stage. Pineal gland, Armour is also supplied as Pineal Gland Tablets, Armour, 1/20 gr. Armour & Company, Chicago. (*Jour. A. M. A.*, Sept. 25, 1915.)

Scopolamine Stable, Roche.—An aqueous solution of pure scopolamine hydrobromide protected against decomposition by the addition of 10 per cent of mannite. It has the properties of scopolamine hydrobromide, U. S. P. It is supplied in ampules, each containing 1.2 Cc. (L Cc. contains 0.0003 Gm. scopolamine hydrobromide.) The Hoffmann-LaRoche Chemical Works, New York. (*Jour. A. M. A.*, Sept. 25, 1915.)

Coagulen, Ciba.—An extract said to be prepared from blood-platelets and to contain thromboplastic substance mixed with lactose, 1 Gm. representing 20 Gm. dried blood. It is said to act as a hemostatic and to be useful in the treatment of local and certain internal hemorrhages. Solutions of Coagulen, Ciba, are used locally, intermuscularly and intravenously. A. Klipstein & Co., New York. (*Jour. A. M. A.*, Sept. 25, 1915.)

Calol Liquid Petrolatum, Heavy.—A non-proprietary brand of liquid petrolatum, U. S. P., said to be derived from California petroleum and to consist essentially of hydrocarbons of the naphthene series. It is colorless, non-fluorescent and practically odorless and tasteless. Its specific gravity is 0.886 to 0.892 at 15 C. Standard Oil Company of California, San Francisco, Cal. (*Jour. A. M. A.*, Sept. 25, 1915.)

Tetanus Antitoxin for Human Use.—Marketed in syringes containing 1,500, 3,000 and 5,000 units each. Cutter Laboratory, Berkeley, Cal.

Diphtheria Antitoxin, Globulin.—Marketed in syringes containing 2,000, 3,000, 4,000, 5,000 and 10,000 units each. Cutter Laboratory, Berkeley, Cal.

Anti-Pneumococcic Serum. — Marketed in syringes containing 10 Cc. Cutter Laboratory, Berkeley, Cal.

Normal Serum (from the Horse).—Marketed in syringes containing 10 Cc. Cutter Laboratory, Berkeley, Cal. (*Jour. A. M. A.*, Sept. 25, 1915.)

PROPAGANDA FOR REFORM.

Filudine.—This is a French proprietary sold in this country by Geo. J. Wallau, Inc., New York. It is offered as a remedy for "biliary insufficiency," "hepatic insufficiency," "intestinal dyspepsia," "all affections of the liver (diabetes, cirrhoses, cancer, etc.)," "malaria," "obesity" and "tuberculosis." The statements in regard to the composition of Filudine are unsatisfactory and even contradictory. The Council on Pharmacy and Chemistry reports that Filudine is a mixture of semi-secret composition; that the therapeutic claims are manifestly unwarranted. The name is not indicative of the composition, whatever that may be, and no rational excuse is offered for the combination of liver and spleen extracts (with or without bile extracts) with "thiomethyl arsinate" or "thio-cinnamate" of caffein. (*Jour. A. M. A.*, Sept. 18, 1915.)

Globeol.—Globeol is sold by Geo. J. Wallau, Inc., along with Urodonal, Jubol and Filudine. The Council on Pharmacy and Chemistry reports that when the description offered by Wallau is divested of obscuring verbiage, Globeol appears to be evaporated horse blood mixed with small quantities of colloid (dialyzed?) iron and manganese and a "dash" of quassia. The Council declared Globeol ineligible for New and Nonofficial Remedies be-

cause its composition is semi-secret; because unwarranted therapeutic claims are made for it, and because the asserted combination is irrational. (*Jour. A. M. A.*, Sept. 18, 1915.)

Verlie Gatlin Wrinkle Remover.—The Verlie Gatlin Beauty and Wrinkle Treatment was a Denver mail order concern, which promised to remove facial blemishes of all sorts and in other ways to make its customers (dupes) beautiful. A postoffice fraud order has been issued against the promoters of this medical fake. (*Jour. A. M. A.*, Sept. 18, 1915.)

The Horowitz-Beebe Cancer Cure.—Dr. J. W. Vaughan, Detroit, Mich., protests against the unauthorized use of his name in connection with the Horowitz-Beebe cancer cure, Autolysin. A private letter witten one week after beginning trials with the cure to Dr. Beveridge was made to do service as a testimonial in a lay magazine. (*Jour. A. M. A.*, Sept. 18, 1915.)

Strychnine Not a Cardiac Tonic.—As a result of investigations carried out in the Massachusetts General Hospital at Boston, Dr. L. H. Newburgh concludes that there is no pharmacologic or clinical evidence which justifies the use of strychnine in the treatment of acute or chronic heart failure. (*Jour. A. M. A.*, Sept. 18, 1915.)

Grant's Epilepsy Cure.—Fred E. Grant, Kansas City, Mo., sells an "epilepsy cure" on the mail order plan. Analysis in the A. M. A. Chemical Laboratory demonstrated it to be a bromide mixture containing as its essential ingredients about 15.8 Gm. potassium bromid and 0.9 Gm. sodium bromid per 100c.c. (*Jour. A. M. A.*, Sept. 4, 1915.)

Episan (Brobor).—The Council on Pharmacy and Chemistry finds Episan, recently renamed Brobor, ineligible for New and Nonofficial Remedies. Neither name indicates the active ingredients—potassium bromid 44.3 per cent, borax 41.2 per cent., zinc oxid 3.68 per cent. and amyl valerate 4 per cent. A physician prescribing the preparation under either name would not realize that he was administering borax, and therefore would not take the precaution to watch the intestines and the kidneys. Also, he would not realize that the treatment was essentially a bromid treatment. There is no evidence to show that borax is harmless, as claimed, or that either borax or zinc oxid is a nerve sedative. (*Jour. A. M. A.*, Sept. 25, 1915.)

NEWS

New Institute for Blind Located at Austin.—The new Blind Institute has been located in Austin by the committee consisting of Governor Ferguson, Lieutenant Governor Hobby and Attorney General Looney. It will be on a tract near the State asylum. Austin raised the $15,000 bonus requested by the Governor.—*Dallas Times-Herald.*

Dr. Carrick to Deliver Lecture at Yale.—Dr. Manton M. Carrick, food technologist and public health expert of Dallas, delivered an illustrated lecture on *Some Hints on Factory Sanitation* in the laboratory building of the Sheffield Scientific School of Yale University, October 30. Dr. Carrick's address was not a technical one, and dealt chiefly with suggestions regarding the sanitary conditions relating to his investigations of the canning industry of America.—*Dallas Times-Herald.*

Port Arthur to Build Rat-Proof Wharves.—A short time ago State Health Officer Collins issued a statement urging upon the cities in which there are ports to build rat-proof wharves and also warehouses, and Port Arthur is the first port that has thus far decided to fully comply with this suggestion, although many of the wharves at Galveston are said to be almost proof against rats.—*San Antonio Light.*

Texas Eclectic Medical Association Meets.—The thirty-second annual convention of the Texas Eclectic Medical Association opened in Dallas October 27, at the Adolphus Hotel, with an estimated attendance of sixty.

Mayor H. D. Lindsley delivered an address of welcome. This was followed by the appointment of committees, reports of standing committees and officers, and election of members.

Discussion of various diseases and their treatment completed the day's session.

In the afternoon session the following officers were elected: Dr. L. V. Bates of Waco, president; Dr. J. M. Watkins of Luling, first vice president; Dr. J. S. Cooper of Dallas, second vice president; Dr. Rosa B. Gates of Waco, treasurer, and Dr. H. H. Blankmeyer of Aransas Pass, secretary.

Waco was selected as the next meeting place and the convention will be held in that city during the Cotton Palace.—*Dallas Times-Herald.*

A Loss to the Public Health Service.—As mentioned in our news columns, Dr. John F. Anderson has resigned the position of director of the Hygienic Laboratory of the United States Public Health Service, to accept that of director of a commercial biologic laboratory. The Public Health Service has sustained other similar losses recently: Dr. M. J. Rosenau, Anderson's predecessor, resigned to accept the professorship of preventive medicine and hygiene at Harvard; Drs. Reid Hunt and Worth Hale left the service to accept the positions of professor and assistant professor of pharmacology, respectively, at the same institution. It may seem discouraging that the Public Health Service should thus be deprived of the services of able men at the period of their great usefulness; at the same time, it is gratifying to realize that educational institutions, as well as some private manufacturing concerns, appreciate the value of such men. While occurrences like these must be discouraging to those who are interested in seeing the Public Health Service successful in its splendid scientific research work, it is a consolation to realize that the service is developing men whose work is appreciated.—*The Journal American Medical Association.*

200,000,000 Red Cross Seals to be Distributed.—Two hundred million Red Cross Christmas seals are now being printed and distributed by the American Red Cross and the National Association for the Study and Prevention of Tuberculosis, according to a statement issued by the latter organization. The proceeds from the sale of these seals will go for the fight against tuberculosis in the communities where the seals are sold.

The organization of the Red Cross seal sale this year will take in every State and Territory of the United States, including Hawaii, Porto Rico and the Canal Zone. By December 1 over 500,000 workers, men, women and children, will be engaged in the campaign.

The sale in 1914 brcke all previous records, totaling over 55,000,000 seals, an increase of 22 per cent. over 1913. After deducting all expenses, this left nearly $500,000 for tuberculosis work in this country. The money has been and is being expended by over 2,000 different agencies who benefited from the sale in amounts ranging from $100 or less to over $25,000. The American Red Cross announces that it will continue its previous successful policy of charging only 10 per cent. of the gross proceeds to State anti-tuberculosis associations, thereby encouraging local work.—*Waco Times-Herald.*

False Statements Regarding Curative Properties of Patent Medicines.—The United States District Court for the Eastern District of Pennsylvania (*Public Health Reports*, p. 3037) has decided that the Sherley amendment to the United States Food and Drugs Act is constitutional. This amendment makes it unlawful to print on the package or label of any drug false and fraudulent statements regarding its curative or therapeutic effects.

The defendant was charged with misbranding a proprietary medicine which was sold under the name of "Bad-Em Salz," and with making false and fraudulent statements as to the curative properties of the remedy. The defense denied that the remedy was misbranded or that the label was calculated to mislead purchasers as to the composition or ingredients of the drug. It was also asserted that the statements relative to the curative properties of the drug were honestly made, that they were expressions of opinion, and that the defendant could not be convicted of crime merely because an opinion was expressed regarding the effects of the drug which differed from that of most physicians.

The court held that the two questions (1) whether the name and label were such as to mislead purchasers respecting the composition of the drug, and (2) whether the statements regarding the curative properties of the drug were false and fraudulent, were both questions of fact which it was the duty of the jury to decide. The jury having decided both questions in the affirmative, the conviction of the defendant was sustained.—*Public Health Reports.*

San Antonio Anti-Vaccination Case May Go to U. S. Supreme Court.—The Supreme Court of the United States may be appealed to by Dr. A. D. Zucht in the effort to have a final determination of the question of whether or not the San Antonio School Board may arbitrarily require vaccination as a condition precedent to the admission of children to the public schools. Don A. Bliss of counsel for Dr. Zucht said that the appeal to the United States Supreme Court can be predicated on allegations that the Constitution is being ignored by reason of the equal protection of the laws being denied some.

"We do not know the exact ground on which the Supreme Court of Texas denied our application for writ of error," said Mr. Bliss. "As soon as we receive a copy of the opinion, we will know how to proceed. In this connection, it never was contended by counsel for Dr. Zucht that the board did not have the right, when an epidemic appeared, to require vaccination; but we did contend that the board had not the arbitrary right to enforce vaccination when no epidemic was raging and none appeared in prospect. For that reason we believe that the rule which has been adopted by the board violates that provision of the Constitution of the United States forbidding any State to deny to any of its citizens the equal protection of the laws."

Texas Surgical Society Meets at San Antonio.—The first semi-annual meeting of the Texas Surgical Society, organized a year ago at Galveston, convened in San Antonio October 18. The purpose of the organization and the purpose of all sessions is to advance the interest of medical science. Membership is limited to surgeons who already have made attainments in that profession. Election to membership in the future will be in the nature of conferring an honor on the candidate.

The following program was rendered: Dr. James E. Thompson of Galveston, president of the society, delivered the opening address; *Treatment of Purulent Appendicitis*, Dr. F. C. Beall, Fort Worth, and *Diffuse Hypertrophy of the Mammary Gland*, Dr. H. M. Doolittle, Dallas. Discussion of the first topic was opened by Dr. R. H. Dudgeon of Waco, who was followed by Dr. Frank Paschal, Dr. C. S. Venable and Dr. S. Burg of San Antonio and Dr. John T. Moore of Houston. *Dermoid Cyst; Report of a Case*, Dr. A. C. Scott, Temple; discussion opened by Dr. R. R. White, Temple; *Prolonged Priapism; Report of Case; Pathology Found at Operation*, Dr. Frank L. Barnes, Houston; discussion opened by Dr. W. Burton Thorning, Houston; *Viscro-Sensory Reflexes in the Diagnosis of Acute Abdominal Conditions*, Dr. K. H. Aynesworth, Waco; discussion opened by Dr. John T. Moore, Houston; *Carcinoma of the Papilla of Vater*, Dr. J. B. Smoot, Dallas; discussion opened by Dr. F. C. Beall, Fort Worth; *Management of Advanced Cases of Tuberculous Hip Disease*, Dr. C. S. Venable, San Antonio; discussion opened by Dr. A. C. Scott, Temple; *The Rational Treatment of Infected Wounds*, Dr. James E. Thompson, Galveston; discussion opened by Dr. Bacon Saunders, Fort Worth; *The Present Status of the Surgical Management of Retro-Displacements of the Uterus*, Dr. John T. Moore, Houston; discussion opened by Dr. Frank Paschal, San Antonio; *Some Post-Operative Abdominal Complications*, Dr. J. H. Reuss, Cuero; discussion opened by Dr. Joe Becton, Greenville.—*San Antonio Light.*

SOCIETY NEWS.

EL PASO DISTRICT—No. 1.
Dr. F. P. Miller, El Paso, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, El Paso, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

El Paso—Dr. C. F. Braden, El Paso; 1st and 3rd Mondays, September to May inclusive.

Reeves-Ward-Pecos—Dr. O. J. Bryan, Pecos.

BIG SPRINGS DISTRICT—No. 2.
Dr. N. J. Phenix, Colorado, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Ector-Midland-Martin-Howard—Dr. W. F. Johnston, Big Springs; 2nd Thursday quarterly.

Fisher-Stonewall—Dr. R. I. Grimes, Sylvester; 1st Tuesday in January and March.

Jones—Dr. A. McK. Jones, Anson; 2nd Tuesday monthly.

Knox-Haskell—Dr. Judd E. Hammond, Munday.

Mitchell—Dr. T. J. Ratliff, Colorado; 2nd Monday January, April, July and October.

Nolan—Dr. A. A. Chapman, Sweetwater.

Scurry-Dickens-Kent—Dr. J. M. Bannister, Snyder; 1st Tuesday in January, April, July and October.

Taylor—Dr. L. J. Pickard, Abilene; 2nd Tuesday monthly.

District Personal.—Dr. A. R. Ponton of Post is spending two months in the clinics of Chicago, Philadelphia, Baltimore and New York. He also attended the meeting of the Clinical Congress of American Surgeons, which was held in Boston, October 28-29. He will return to his practice the latter part of November.

PANHANDLE DISTRICT—No. 3.
Dr. W. C. Dickey, Memphis, Councilor.

District Society—Dr. T. D. Frizzell, Quanah, President; Dr. J. J. Crume, Amarillo, Secretary.

Secretaries of Sections—Surgery, Dr. F. B. Bryan, Childress; Medicine, Dr. E. H. Snyder, Canadian; Gynecology and Obstetrics, Dr. B. L. Jenkins, Clarendon; Pediatrics, Dr. S. P. Vinyard, Amarillo.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Childress—Dr. F. B. Bryan, Childress; 1st Tuesday monthly.

Collingsworth—Dr. H. B. Worley, Wellington; Tuesdays.

Dallam-Hartley-Sherman—Dr. R. L. Owens, Dalhart; 2nd Tuesday.

Donley—Dr. T. H. Ellis, Clarendon; 1st Thursday monthly.

Foard—Dr. R. L. Kincaid, Crowell; 2nd Monday quarterly.

Hale-Swisher—Dr. E. F. McClendon, Plainview; 2nd Tuesday monthly.
Hall—Dr. W. C. Mayes, Memphis; 2nd Tuesday monthly.
Hardeman—Dr. T. D. Frizzel, Quanah; 2nd Thursday monthly.
Hemphill-Roberts-Lipscomb-Ochiltree—Dr. H. C. Caylor, Canadian; 1st Monday monthly.
Lubbock-Crosby—Dr. J. T. Hutchinson, Lubbock; 1st and 3rd Tuesdays monthly.
Potter—Dr. J. J. Crume, Amarillo; 2nd Monday monthly.
Wichita—Dr. L. F. Stripling, Wichita Falls; 2nd Tuesday monthly.
Wilbarger—Dr. Richard W. Hix, Vernon; 3rd Monday monthly.

SAN ANGELO DISTRICT—No. 4.

Dr. S. C. Parsons, San Angelo, Councilor.

District Society.—Dr. J. M. Horn, Brownwood, President; Dr. R. H. Cochran, Coleman, Secretary. Next meeting, San Angelo, November 2-3, 1915.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Brown—Dr. H. C. Eargle, Brownwood; 2nd Tuesday monthly.
Coleman—Dr. R. Bailey, Coleman; 1st Thursday monthly.
Lampasas—Dr. W. D. Francis, Lampasas; 1st Tuesday March, June, September and December.
McCulloch—Dr. J. S. Anderson, Brady; 1st Monday monthly.
Menard-Kimble—Dr. W. M. Fenley, Menard.
Runnels—Dr. E. R. Middleton, Winters; 2nd Thursday monthly.
Tom Green—Dr. G. W. Nibling, San Angelo; Tuesday before full moon.

SAN ANTONIO DISTRICT—No. 5.

Dr. W. A. King, San Antonio, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Atascosa—Dr. W. E. Seale, Charlotte; 2nd Tuesday monthly.
Bexar—Dr. W. H. Hargis, San Antonio; from October to May. 1st Thursday, Section on Eye, Ear, Nose and Throat; 2nd Thursday, Section on Medicine; 3rd Thursday, State Medicine, Public and Personal Hygiene; 4th Thursday, Obstetrics and Gynecology.
Comal—Dr. L. G. Wille, New Braunfels; 2nd Saturday quarterly.
Guadalupe—Dr. M. B. Brandenburger, Seguin; 1st Tuesday monthly.
Gonzales—Dr. W. T. Dunning, Gonzales; 1st Monday monthly.
Karnes—Dr. R. C. Youngblood, Falls City; bi-monthly.
Kerr-Kendall-Gillespie-Bandera—Dr. Wm. Lee Secor, Kerrville; 1st Monday alternate months.
La Salle-Frio—Dr. R. L. Graham, Cotulla; meets quarterly.
Medina—Dr. J. H. Fletcher, Hondo; 2nd Wednesday monthly.
Uvalde-Edwards—Dr. S. B. Hudson, Sabinal; 1st Tuesday monthly.
Val Verde—Dr. D. A. York, Del Rio; 1st Monday monthly.
Wilson—Dr. J. E. Sparks, Floresville; quarterly.

CORPUS CHRISTI DISTRICT—No. 6.

Dr. W. N. Wardlaw, Corpus Christi, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bee—Dr. E. P. Cayo, Beeville; Monday quarterly.
Cameron—Dr. C. W. Skipper, Westville; 2nd Wednesday monthly.
Hidalgo—Dr. W. R. Dashiell, Mission; 5th day monthly
Jim Wells—Dr. M. J. Perkins, Alice.
Kleburg—Dr. R. L. Mathews, Kingsville.
Nueces—Dr. A. W. Davisson, Corpus Christi; 1st and 3rd Fridays monthly.
Refugio—Dr. Roy T. Goodwin, Sinton.
San Patricio—Dr. L. J. Manhoff, Aransas Pass.
Webb—Dr. E. H. Sauvignet, Laredo; 1st Wednesday monthly.

AUSTIN DISTRICT—No. 7.

Dr. T. J. Bennett, Austin, Councilor.

District Society—Dr. Z. T. Scott, Austin, President; Dr. W. A. Harper, Austin, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bastrop—Dr. P. Chapman, Smithville; 2nd Tuesday bimonthly.
Burnet—Dr. H. S. Garrett, Bertram.
Caldwell—Dr. Edgar Smith, Lockhart; 2nd Tuesday monthly.
Hays—Dr. P. J. Shaver, San Marcos.
Lee—Dr. C. M. Jones, Ledbetter; 1st Tuesday in June, September, December and March.
Llano—Dr. C. F. Darnall, Llano; 2nd Tuesday monthly.
San Saba—Dr. C. L. Behrns, Cherokee; 2nd Tuesday each month.
Travis—Dr. J. C. A. Eckhardt, Austin; 2nd Thursday monthly.
Williamson—Dr. E. M. Wood, Georgetown; 2nd Wednesday.

DEWITT DISTRICT—No. 8.

Dr. Walter Shropshire, Yoakum, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Houston, April, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Colorado—Dr. W. G. Youens, Colorado; 2nd Wednesday February, April, June, August, October and December.
DeWitt—Dr. B. J. Nowierski, Yorktown; 3rd Wednesday monthly.
Fayette—Dr. C. M. Hoch, LaGrange.
Lavaca—Dr. Walter Shropshire, Yoakum; 2nd Tuesday monthly.
Matagorda—Dr. S. A. Foote, Bay City; 2nd Wednesday monthly.
Victoria-Calhoun—Dr. F. L. Sargeant, Victoria; 20th monthly.
Wharton-Jackson—Dr. W. B. Huey, El Campo; 3rd Friday monthly.

THE LAVACA COUNTY MEDICAL SOCIETY met in Yoakum October 12. Dr. Arment read a paper on *Anthrax*, and Dr. J. E. Lay of Hallettsville discussed *The Use of Bulgarian Bacillus*. Both papers were good and were thoroughly enjoyed by the hearers. Dr. Lay was requested by a unanimous vote of the society to tender his paper to the Section of Medicine of the State Medical Association for its next program. At the conclusion of the program those present were requested to prepare questions on medical ethics to be answered and discussed at the next meeting. Those in attendance were Drs. Lay, Ramsel, Gray, Arment, Duncan, Shropshire, Brown and Dimmitt.

SOUTHERN DISTRICT—No. 9.

Dr. W. W. Ralston, Houston, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Houston, April, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Austin—Dr. Otto E. Steck, Bellville; 1st Tuesday quarterly.
Brazos—Dr. R. J. Hunnicutt, Bryan.
Brazoria—Dr. A. J. Pollard, Alvin; 1st Thursday after 1st Monday.
Burleson—Dr. T. L. Goodnight, Caldwell.
Fort Bend—Dr. R. M. Munroe, Richmond.
Galveston—Dr. M. L. Graves, Galveston; last Friday monthly.
Grimes—Dr. E. A. Harris, Navasota; 1st Wednesday monthly.
Harris—Dr. B. T. Van Zant, Houston; every Friday night.
Madison—Dr. J. E. Morris, Madisonville; last Tuesday monthly.
Montgomery—Dr. H. W. Earthman, Conroe; 2nd Monday monthly.
Waller—Dr. R. E. Bing, Waller; 1st Monday quarterly.
Walker—Dr. J. W. Thomason, Huntsville; 2nd Tuesday bi-monthly.
Washington—Dr. R. H. Lenert, Brenham; quarterly.

SOUTHEASTERN DISTRICT—No. 10.

Dr. A. R. Sholars, Orange, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Houston, April, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Hardin—Dr. Lee Selman, Olive; last Saturday monthly.
Jasper-Newton—Dr. D. McMicken, Kirbyville; 4th Wednesday quarterly.
Jefferson—Dr. B. P. Holland, Beaumont; 1st Monday monthly.
Nacogdoches—Dr. T. J. Blackwell, Nacogdoches; 2nd Wednesday monthly.
Orange—Dr. A. R. Sholars, Orange; 1st Tuesday monthly.
Polk—Dr. T. H. Bates, Camden; 1st Wednesday monthly.

Sabine—Dr. W. T. Arnold, Jr., Hemphill; 2nd Wednesday monthly.
Shelby—Dr. J. H. Windham, Shelbyville; 2nd Tuesday monthly.

THE SOUTH TEXAS DISTRICT MEDICAL SOCIETY.—The thirty-eighth semi-annual meeting of the South Texas District Medical Society was held in Nacogdoches October 7th and 8th. Fifty-six members were registered; forty attended the section on medicine and diseases of children; forty-five the section on preventive medicine; forty-two the surgical section, while thirty-two members attended the section on obstetrics and gynecology.

The public health meeting, a new feature on the program, was held in the Nacogdoches Auditorium, with 175 laymen attending. On this occasion Mr. Eugene A. Blount of Nacogdoches delivered an address on *The Doctor and Patient*, Dr. James J. Terrill, Temple, spoke on *The Gospel of Clean Living*, and Dr. John T. Moore, Houston, spoke on *Common Sense in Handling Our Public Health Problems*.

A resolution was passed, authorizing the president to appoint a committee, composed of five members, and to be known as the Public Health Committee, with instructions to devote its labors to the study of pellagra in the districts composing the organization and to present a preliminary report of the work done at the next meeting. Members of this committee are to hold office one year and are to collaborate with the Public Health Committee of the State Association.

The following officers were elected: President, Dr. A. E. Malsch, Victoria; vice president, Dr. Charles C. Green, Houston; secretary-treasurer, Dr. W. F. Thomson, Beaumont (re-elected).

The next meeting will be held in Houston in April, 1916.

EASTERN DISTRICT—No. 11.
Dr. C. C. Nash, Palestine, Councilor.

District Society—Dr. E. B. Parsons, Palestine, President; Dr. E. H. Vaughn, Tyler, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Anderson—Dr. E. B. Parsons, Palestine; 1st Monday monthly.
Angelina—Dr. J. C. Van Nuys, Lufkin; 1st Tuesday monthly.
Cherokee—Dr. T. H. Cobble, Rusk; 4th Tuesday monthly.
Freestone—Dr. E. V. Headlee, Teague; 1st Tuesday monthly.
Henderson—Dr. A. H. Easterling, Athens; 1st Mondays.
Houston—Dr. W. W. Latham, Crockett; 2nd Tuesday monthly.
Leon—Dr. V. L. Smith, Jewett; 1st Tuesday in April; 2nd Tuesday in October.
Panola—Dr. A. M. Baker, Carthage.
Rusk—Dr. W. P. White, Henderson; 2nd Tuesday quarterly.
Smith—Dr. L. P. Tenney, Troup; 2nd Tuesday monthly.
Trinity—Dr. W. H. Pope, Jr., Trinity; 3rd Thursday

CENTRAL DISTRICT—No. 12.
Dr. A. C. Scott, Temple, Councilor.

District Society—H. C. Black, President; Dr. H. F. Connally, Waco, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bosque—Dr. C. C. Cate, Morgan; 1st Wednesday.
Bell—Dr. L. R. Talley, Temple; 1st Wednesday quarterly.
Comanche—Dr. Charles Ory, Comanche; 1st Thursday monthly.
Coryell—Dr. Ed. Graves, Gatesville; last Wednesday bi-monthly.
Erath—Dr. S. D. Naylor, Stephenville; 2nd Wednesday bi-monthly.
Falls—Dr. Aug. Streit, Marlin; 1st and 3rd Mondays.
Hamilton—J. H. Wysong, Hico; 2nd Wednesday monthly.
Hill—Dr. J. E. Boyd, Hillsboro; 2nd Friday.
Hood-Somervell—Dr. G. D. Ross, Paluxy; Wednesday before the full moon.
Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.
Limestone—Dr. M. M. Brown, Mexia; 3rd Thursday bi-monthly.
Milam—Dr. G. B. Taylor, Cameron; 2nd Tuesday bi-monthly.
McLennan—Dr. D. L. Eastland, Waco; 1st Tuesday.
Navarro—Dr. W. D. Cross, Corsicana; 1st Monday.
Robertson—A. J. Sharp, Franklin; 2nd Tuesday bi-monthly.

DISTRICT PERSONALS.—Dr. Carl Lovelace and Miss Lucile Hill, both of Waco, were married October 29.

While crossing the Katy tracks in East Waco on October 26, a two-passenger automobile driven by Dr. F. G. Armstrong of Delia was hit by a gravel train and dragged at least a hundred yards. Dr. Armstrong saved his wife's as well as his own life by grasping a bar on the train with one hand while holding his wife with the other. Both were painfully but not seriously injured. The automobile was completely wrecked.

NORTHWESTERN DISTRICT—No. 13.
Dr. C. B. Williams, Mineral Wells, Councilor.

District Society—Dr. J. H. Eastland, Mineral Wells, President; Dr. R. A. Duncan, Graham, Secretary. Next meeting will be in Seymour, April 11-12, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Baylor—Dr. C. E. Johnson, Seymour; 2nd Tuesday.
Clay—Dr. B. M. Puckett, Henrietta; 2nd Wednesday.
Eastland—Dr. W. P. Lee, Cisco; 2nd Tuesday bi-monthly.
Parker-Palo Pinto—Dr. E. A. Davis, Mineral Wells; 2nd Tuesday monthly.
Stephens—Dr. J. H. Ball, Crystal Falls; 1st Tuesday quarterly.
Throckmorton—Dr. D. C. Wylie, Throckmorton.
Young—Dr. W. H. Logan, Graham; 2nd Tuesday bi-monthly.

THE NORTHWEST DISTRICT MEDICAL SOCIETY met in Mineral Wells, October 19-20. Fifty members were in attendance. The meeting was opened by the president, Dr. J. H. Eastland of Mineral Wells. The invocation was delivered by Rev. W. R. Potter, after which Mayor Cranford delivered the address of welcome, which was responded to by Dr. H. F. Leach of Weatherford.

Dr. Phil R. Simmons, Weatherford, read a paper, *Sympathetic Ophthalmia*, in which he gave observations on some of the cases he studied while in New Orleans during the summer. He reported instances of loss of sight occurring when an injured eye was not properly treated. The paper was discussed by Dr. C. B. Williams of Mineral Wells.

Dr. R. H. Gough, Fort Worth, read a paper on *Hemorrhage of the Anterior Cerebral Artery, Report of a Case*, in which the blood clot had formed and the abscess had produced exophthalmos. He presented a number of *x*-ray plates.

Dr. John L. Davis of the Amicable Life Insurance Company of Waco, read a paper on *The Relation of the Medical Examiner to the Medical Director*. A lively discussion ensued. A majority of those present favored some kind of substandardized insurance for those who were unable to obtain full insurance. It was also stated that no one should be permitted to see an application after the physician had made the examination, but that it should be mailed immediately to the medical director.

Dr. C. H. McCollum, Fort Worth, read a paper on *Hernia of the Anterior Vaginal Wall*.

Dr. J. M. Luttrell, Mineral Wells, read a paper on *Electricity in Gynecology*. He said he ordinarily used the galvanic current, and laid careful stress on the proper use of electricity in order to obtain the maximum results. Carelessness in detail has led many to abandon this useful therapeutic measure. He reported several cases treated for uterine hemorrhage with good results.

Dr. T. C. Terrell, Fort Worth, read a paper on *Respiratory Vaccines*. He gave numbers of instances where patients had been benefited by this

treatment. Dr. W. H. Walker told of having taken the vaccine for hay fever, with excellent results. Dr. Terrell stressed the importance of having fresh vaccines.

Dr. C. C. Parrish, Fort Worth, presented an interesting paper on *Pellagra*, after which the members were photographed and given an automobile ride around the city. The ride was followed by a sumptuous banquet at the Hotel Damron, with Dr. Eastland as toastmaster. A short clinic was held after the banquet.

Dr. I. L. Van Zandt, Fort Worth, read a paper on *Scarlet Fever*, in which he stressed the importance of silver salts in the treatment, especially Crede's Ointment and Collargol.

Dr. M. M. Walker, Wichita Falls, read a paper on *Some Abdominal Conditions Following Operations*, which received much discussion. He talked on care in administering anesthetics and the psychic condition of the patient necessary to insure a state of tranquillity. This tranquil condition can be best judged by the condition of the pulse. In his opinion, peritonitis was generally due to some condition which existed prior to the operation. Dr. Davis, Mineral Wells, said that much of the shock seen by surgeons after operations was due to large doses of calomel and other drastic purgatives used in the so-called preparation of the patient.

Dr. H. F. Leach, Weatherford, read a paper on *Surgical Conditions Which Might Follow Labor.* This was followed by a paper on *Post-Operative X-Ray in the Treatment of Cancer, of Equal Importance to the Operation.* The importance of *x*-ray after-treatment following the removal of the cancer by operation, was emphasized. Dr. R. A. Duncan, in discussing the paper, told of the relations which existed between the various stomach disorders and appendicitis.

The following section officers were appointed: Medicine, Dr. H. H. Key, Jacksboro, chairman; Dr. B. E. Braselton, Bridgeport, secretary. Gynecology and Obstetrics, Dr. J. E. King, Throckmorton, chairman; Dr. C. A. Turner, Woodson, secretary. Surgery, Dr. M. M. Walker, Wichita Falls, chairman; Dr. G. B. Hamilton, Olney, secretary. Eye, Ear, Nose and Throat, Dr. C. R. Hartsook, Wichita Falls, chairman; Dr. L. F. Stripling, Wichita Falls, secretary. The next meeting will be held in Seymour, April 11-12, 1916.

NORTHERN DISTRICT—No. 14.

Dr. A. W. Carnes, Hutchins, Councilor.

District Society—R. W. Baird, Dallas, President; Dr. H. L. Moore, Dallas, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Collin—Dr. E. L. Burton, McKinney; 1st Tuesday.
Cooke—Dr. J. R. Lewis, Gainesville; 2nd Tuesday.
Dallas—Dr. R. S. Loving, Dallas; 2nd and 4th Thursdays.
Delta—Dr. C. C. Taylor, Cooper; 1st Monday.
Denton—Dr. W. G. Kimbrough, Denton; Tuesday following 1st Monday.
Ellis—Dr. E. F. Gough, Waxahachie; 2nd Tuesday.
Fannin—Dr. E. H. H. Foster, Bonham; 2nd Thursday monthly.
Grayson—Dr. Davis Spangler, Sherman; 1st Tuesday.
Hopkins—Dr. J. H. Holbrook, Sulphur Springs; 1st Wednesday.
Hunt—Dr. M. L. Wilbanks, Greenville; 2nd Tuesday.
Kaufman—Dr. B. J. Hubbard, Kaufman; 1st Tuesday, February, April, June, August, October and December.
Lamar—Dr. W. W. Fitzpatrick, Paris; 1st Thursday.
Montague—Dr. C. F. Young, Bowie; 2nd Tuesday monthly.
Tarrant—Dr. J. J. Richardson, Fort Worth; 1st and 3rd Fridays.
Van Zandt—Dr. D. L. Sanders, Wills Point; 1st Friday.
Wise—Dr. L. H. Reeves, Decatur; 3rd Tuesday each month.

THE DALLAS COUNTY MEDICAL SOCIETY met in regular session October 14. The executive body met previous to the general meeting and discussed plans for more concerted effort in medical work in Dallas. A communication from the Dallas County Dental Society was read, in which it was stated that the Dental Society had assumed control and responsibility of the State Dental College of Dallas, and asked for the support and good will of the Medical Society. Another letter from the Dental Society was also read, announcing the election of the entire membership of the Dallas County Medical Society to associate membership in that organization. The secretary was instructed to reply to the letters, thanking the dentists for their recognition and assuring them of the support of the Medical Society.

In the general meeting Dr. H. Leslie Moore reported a death from cerebral hemorrhage, during confinement.

Dr. R. H. Lehmann reported a case of acute yellow atrophy of the liver in a non-pregnant woman, in which the diagnosis was made post mortem. He urged the necessity of necropsy in all possible cases.

Dr. S. E. Milliken reported a case of eclampsia.

Dr. O. M. Marchman reported the case of a man, 65 years old, with a condition resembling floating spleen, causing intestinal obstruction. Operation revealed a malignant tumor of the omentum.

Dr. M. E. Taber reported a case of absence of both frontal sinuses.

Dr. W. B. Carrell reported operating in anticipation of ruptured pus tubes.

Dr. J. R. Worley reported a death during anesthesia, in which the post mortem disclosed extensive double pleuritic effusion.

Dr. J. O. McReynolds reported an injury from cranking an auto, causing fracture of the sphenoid, hemorrhage into the orbital cavity, pressure and blindness.

Dr. W. D. Jones read a paper, *Report of an Operation for Double Mastoid.* The paper was discussed by Drs. Taber and McReynolds.

Dr. R. S. Loving read a paper entitled *Phthisiophobia.*

Two applications were referred to the censors, and the following were elected to membership: Drs. J. H. Morris, I. A. Estes, Jonah Nichols, W. F. Hagaman, H. T. Smith, Rufus Whitis and Ernest Nitsche.

Dr. Arms of the Medical Department, University of Texas, addressed the society relative to the Better Babies Contest to be held at the Dallas Fair, and asked the assistance of the society in the work. The president appointed a committee to arrange the details for the medical work.

Dr. Baker spoke for the board of censors relative to discrimination in the selection of members.

THE DALLAS COUNTY MEDICAL SOCIETY met October 28. The following cases were reported:

Dr. J. T. Watson exhibited an anomalous placenta, in which there was an apparent separation of the amnion and chorion.

Dr. J. M. Neal reported a fracture and dislocation of the olecranon.

Dr. J. B. Smoot reported a case which had been diagnosed by several as carcinoma of the stomach, but which showed at operation to be a normal stomach and the symptoms due to the omentum adherent to the sac of an inguinal hernia.

Dr. J. S. Tomkies read a paper on *Specific Vaginitis in Children*, which was discussed by Drs. Smoot, Swain and Hopkins.

Dr. I. J. Morris read a paper on *Acidosis in Children*, which was discussed by Drs. Carnes, White, Greer, Hopkins, Aronson, Worley and Stone.

It was decided that a rally banquet be held No-

vember 4 to complete arrangements for the Southern Medical Association meeting.

THE HUNT COUNTY MEDICAL SOCIETY met in regular session, October 12, at Greenville. This had been designated as Clinic Day, and the following cases and clinics were reported:

Dr. M. L. Wilbanks reported a case of psoriasis. He said: Psoriasis is a chronic dermatitis, characterized by more or less numerous dry, reddish, variously sized, rounded and sharply defined thickened patches, covered with white, grayish-white, or mother-of-pearl-colored, imbricated scales, usually abundant in quantity. Psoriasis is always a dry, scaly eruption and never has oozing or liquid exudation, and never vesicles or pustules. It begins with variously sized, pin-head-sized groups or patches about on different parts of the body, numbering from a few to hundreds. The onset is usually slow. These maculepapules are covered with grayish-white scales, the imbrication increasing near the edge.

This disease is now generally thought to be parasitic, although there is a lack of positive proof to this effect. Others hold that it is neuropathic. It constitutes from 2 to 3 per cent. of all skin affections. To bear out the neuropathic idea, it is known to follow errors in diet, arthritic and other conditions.

Dr. C. E. Cantrell said that the disease is of neuropathic origin, a degeneration of the central nervous system, and does not get well. It is similar to pellagra, due to degeneration of nerve tissue.

Dr. T. J. Milner said that the striking thing about these cases is the lack of after-effects. It is a neuropathic disease and always leaves a thickened condition of the skin. He said he never saw a case cured.

Dr. C. L. Gregory said he saw the case when it first came under the doctor's treatment, and agreed with him in the diagnosis, but does not agree with him that every case is easy of diagnosis.

Dr. J. W. Benton reported that a stone had been removed from the bladder of a patient presented by him before the society at its July meeting. The stone was about the size of a hen's egg.

Dr. C. E. Cantrell reported a case of tumor in the wall of the uterus, in the horn, of the appearance of degenerated brain substance and about the size of the head of a three-months foetus.

The applications for membership of Drs. B. A. Prestridge of Emory and W. R. Cate of Cumby were received.

It was suggested by the president, Dr. Gregory, that in all probability the Hotel Beckham would not be ready for occupancy by the time of the meeting of the North Texas Medical Association in December, and the program committee was directed to handle the situation to the best possible advantage, and if necessary to notify the secretary that another meeting place might be secured in time.

THE KAUFMAN COUNTY MEDICAL SOCIETY held its regular October meeting at Kemp, with twelve members in attendance. An interesting class of clinical cases was shown and discussed. Dr. Jarmon read a paper on *The Latest Theory of the Cause and Treatment For Puerperal Eclampsia.* At the close of the meeting Dr. Hubbard, at the invitation of the Parent-Teachers' Association, addressed the public at the Presbyterian Church on *School Sanitation and Community Health.* A number of the older school children were present.

The Kaufman County Society is endeavoring, by means of these public health lectures, to instruct the laity along these lines, and much good is being accomplished.

THE TARRANT COUNTY MEDICAL SOCIETY held its regular monthly meeting in Fort Worth, October 1, 1915, with twenty-five members present.

Drs. Wilmer and Bruce Allison presented a patient, a boy about 8 years of age, whose present trouble began the day of the recent Galveston storm, in August. The first symptom had been a difficulty in handling a knife and fork while at meals. This condition progressed until a partial left side paralysis had fully developed. His speech was also affected, and at the time of presentation of the case he was almost completely paralyzed on both sides. He could not stand unassisted, and volunteer movements were jerky in character. Family history was negative, as was the personal history. The patient appeared to be anemic and the tonsils were enlarged, but there were no eye symptoms, the reflexes were normal, stools negative and mental condition good. A diagnosis of paretic chorea was made. Dr. J. H. McLean reported, in connection with his discussion of this case, a patient who undoubtedly presented a patent foramen ovale and another, an exaggerated case of chorea. Dr. C. H. McCollum, in discussing the case remarked upon the great number of similar cases he had seen in a London hospital, most of which came from the rheumatic ward.

Dr. J. H. McLean read a paper on *Surgical Phases of Diseases of the Stomach*, in which he recited the development of abdominal and stomach surgery, giving the American surgeon credit for the development of this work, although it had its origin in Europe. Dr. McLean called particular attention to the necessity of team work between the internist, roentgenologist and surgeon, in working up diseases of the stomach and deciding what procedure is best. When a stomach case ceases to be medical and becomes surgical cannot be definitely determined, but it was the opinion of the writer that sixty days' intelligent medical treatment with no appreciable relief was pretty good evidence that a surgeon had better be called in.

Dr. Holman Taylor, in discussing the paper, dwelt particularly on the safety of surgical procedure as it relates to the stomach, and after excluding the neuroses, heartily approved of the author's stand that sixty days was sufficient time for an internist to develop the medical side of a case of this character.

Dr. C. H. McCollum spoke particularly along the line of *x*-ray diagnosis of abdominal diseases, and called attention to the fact that the stomach could occupy absolutely abnormal positions in the abdomen and yet show no abnormal symptoms.

Dr. Wilmer Allison discussed the ability of the stomach to handle foreign material, and reported several instances of a remarkable character. One of the inmates of an insane asylum was found to have swallowed several water spiggots, and another several pieces of large rope, something like a foot in length, without apparent injury at the time.

Dr. Wilmer Allison called attention to the difficulty of securing salvarsan and discussed the value of cacodylate of soda, intravenously, stating that he had been using it in this manner for some time, with good effects and no ill effects. He discountenanced the use of venarsen, on the ground that it was nothing more, so far as practical considerations were concerned, than a solution of cacodylate of soda, for which a large price was charged.

Dr. Bond withdrew the resolution he introduced at the preceding meeting, requesting the House of Delegates of the State Medical Association of Texas to change Tarrant County from the Fourteenth to the Thirteenth district.

The secretary was ordered to extend to Drs. H. V. Helbing and S. A. Woodward the best wishes of the society for their speedy recovery from illness.

NORTHEASTERN DISTRICT—No. 15.
Dr. W. H. Blythe, Mt. Pleasant, Councilor.

District Society—Dr. R. Y. Lacy, Pittsburg, President; Dr. J. N. White, Texarkana, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bowie—Dr. E. M. Watts, Texarkana; 4th Friday.
Camp—Dr. R. Y. Lacy, Pittsburg; 1st Wednesday.
Cass—Dr. J. T. Herndon, Linden; 1st Wednesday.
Franklin—Dr. Z. C. Fuquay, Mount Vernon; 1st Tuesday.
Gregg—Dr. W. D. Northcutt, Secretary.
Harrison—Dr. J. B. Baldwin, Marshall; 1st Tuesday.
Marion—Dr. S. A. Miller, Jefferson; 1st Thursday monthly.
Morris—Dr. R. C. Farrier, Omaha; 1st Tuesday quarterly.
Titus—Dr. W. H. Blythe, Mount Pleasant; 2nd Tuesday.
Upshur—Dr. T. S. Ragland, Gilmer; 2nd Tuesday.
Wood—Dr. V. E. Robbins, Quitman; last Friday monthly.

THE NORTHEAST DISTRICT MEDICAL SOCIETY.—The Northeast District Medical Society announces the following officers, elected at the Omaha meeting in October:

President, Dr. R. Y. Lacy, Pittsburg; first vice president, Dr. R. C. Farrier, Omaha; second vice president, Dr. C. D. Hibbitts, Naples; secretary-treasurer, Dr. J. N. White, Texarkana.

The meeting time was changed so that hereafter the society will meet but once a year instead of twice, as heretofore, and under the new schedule the annual meeting will be held the third Tuesday in November of each year. Pittsburg was selected as the next meeting place.

DISTRICT PERSONAL.—Dr. Guy O. Shirey of Fort Worth and Miss Louise Frances Ball of New Boston will be married November 3, 1915. They will reside in Fort Worth. The bride is the daughter of Dr. and Mrs. S. C. Ball.

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

W. H. HARGIS, President.....San Antonio.
W. H. BLYTHE, Vice-President.....Mt. Pleasant.
H. L. WILDER, Secretary-Treasurer.....Glen Rose.

NEW AND REINSTATED MEMBERS.

Dallas County—J. H. Morris, I. A. Estes, Jonah Nichols, W. F. Hagaman, H. T. Smith, Rufus Whitis, Ernest Nitsche, Dallas.
Grayson County—J. M. Slaughter, Van Alstyne; W. O. Curlee, Tom Bean.
Hale-Swisher County—W. H. Freeman, Cordell, Okla.
Hemphill-Roberts-Lipscomb-Ochiltree County—W. J. Brewer, Ochiltree.
Jim Wells County—C. L. Porch, Orange Grove.
Johnson County—E. P. Smith, Grandview.
McLennan County—J. L. Davis, Waco.
Scurry-Dickens-Kent County—Geo. J. Parsons, Ira.
Tom Green County—C. T. Keys, San Angelo; C. W. Williams, W. F. Chambers, Bronte; F. K. Turney, Robert Lee.
Travis County—F. C. Maxwell, J. H. Thorn, Garcia Alberto, Austin; E. T. Morris, Delvalle; W. E. Holtzclaw, Clay Lauderdale, Buda.
Wichita County—M. H. Moore, Wichita Falls.

CHANGE OF ADDRESS.

Dr. Eusebio Guajardo, from San Antonio to Monterey, Mexico.
Dr. L. H. Denman, from Lufkin to Manning.
Dr. J. M. Gill, from Cameron to Austin.
Dr. J. A. Neely, from Peters to Bellville.
Dr. W. E. Seale, from Poteet to Charlotte.
Dr. W. E. Herrin, from Miles to Garland.
Dr. T. G. Howe, from Douglasville to Atlanta.
Dr. A. R. Kuykendall, from Weatherford to Thurber.
Dr. W. C. Wright, from Galveston to Turnersville.
Dr. C. F. Fowler, from Galveston to Austin.
Dr. J. T. Roberts, from Taylor to Gilmer.
Dr. R. C. Black, from Bayside to Tanglewood.
Dr. E. Gregory, from White City to Jasper.
Dr. J. H. Mackay, from Francitas to Houston.
Dr. C. M. Cash, from Abilene to San Benito.
Dr. W. J. Davis, from Cleburne to Paint.

SOME IMPORTANT FACTORS IN SOCIETY ADMINISTRATION.*

BY
L. H. REEVES, M. D.,
DECATUR, TEXAS.

In a brief way I wish to call attention to some factors that seem to me to be rather important in society administration.

The role of the secretary in society work is necessarily an important one, and is in many ways rather a peculiar one. If the society is doing good work, the meetings well attended, cases reported, clinics presented, etc., it is all taken as a matter of fact. No one receives any special credit, and success usually is attributed to the fact that the membership is waking up. But if there is marked lack of interest, meetings not well attended and the society lagging along, the responsibility is invariably placed on the head of the secretary, and the society is ready to criticize him and attribute the lagging to the fact that he is failing in his efforts to keep things going.

Physicians are sometimes accused, as we know, of accepting office merely for the honor there is supposed to be in it, not being willing to devote a reasonable length of time to the work of the office, and there is more work falling to the secretary of a medical society than to any other officer. No physician should accept this office unless he is willing to devote a reasonable length of time to the duties thereof.

There are various ways in which the membership may be reached. One very important feature, I believe, is to appeal to the pride of the members in the matter of making the best showing possible, and place individual responsibility just as far as we can. By doing this I believe we can get stronger co-operation.

My personal observation is that the bulletin is a most important factor in society work. In each issue there should be a brief report of the previous meeting, and program for the next meeting or even the next few meetings. Through its columns the secretary should be able to get the membership more interested in the subject of vital statistics and the reporting of communicable diseases; and these two things are generally most sadly lacking. Through the bulletin there should be greater effort to interest the physicians in preventive medicine; for before the public can be properly interested along this line it is essential that physicians manifest more interest along the lines of preventive medicine.

I believe we should get out of the old rut of having the usual round of papers, and pay more attention to health conservation and preventive medicine and pay more attention to the various health problems. An occasional open session to which the public is invited is always worth while, and is a great means of sowing seed in a fertile soil that will do unlimited good. Once or twice a year, I believe, the meeting should be devoted entirely to public health problems, discussing the various and best methods of interesting the public in this direction. I believe a joint meeting of the dentists, druggists and doctors of the county, independent of the medical society, is a means of bringing the professions closer together, securing better co-operation and is certainly worth while, for the better we become acquainted the better work we are going to do.

An occasional address by some prominent physician from out of the county is always worth while. An occasional meeting devoted entirely to clinics and report of cases, is another means of bringing

*Read before the State Association of County Secretaries, Fort Worth, May 6, 1915.

out the membership and securing greater interest. Instead of having the usual round of papers, have a program committee to arrange the programs for a few meetings ahead, selecting some member to discuss a subject only from the surgical standpoint, and others to discuss it only from the medicinal standpoint. Send out the program or bulletin, early each month.

Of course, there are many ways in which the membership may be reached and stimulated individually, and each society's needs must be studied individually. But by following the above suggestions, in a general way, I believe we will be able to get better co-operation and do more scientific and better society work.

DEATHS

Dr. John Hunter Pope, twelfth president of the State Medical Association of Texas, died at Marshall, Texas, September 20, 1915, after a brief illness from pneumonia.

Dr. Pope was born in Washington, Wilkes County, Georgia, February 12, 1844. His father was Hon. Alexander Pope, a prominent lawyer, who was a close personal friend of Alexander Stephens. His mother was Mrs. Sarah Willie Pope, sister of Hon. James Willie, first Attorney General of the Republic of Texas, and Judge Asa H. Willie, Chief Justice of the Supreme Court of Texas. His parents moved to Texas in 1858 and located at Marshall.

Dr. Pope enlisted in the Confederate Army when 18 years of age, and fought bravely through the entire war. He was severely wounded at the battle of Chickamauga. At the close of the war Dr. Pope entered the University of Virginia, and graduated from the Medical Department in 1868. He afterwards attended the Medical Department of the University of Louisiana, graduating from this institution in 1869.

He was elected president of the State Medical Association in 1879 and served in this high position with distinction. He was a member of the National Board of Health during its existence. He was the author of several valuable contributions to medical literature, notable among which were, *The Menace of Mexico to the Public Health of the United States*, and *The History of the Yellow Fever Epidemic in Marshall in 1873*.

Dr. Pope located at Milford, Ellis County, upon leaving school, where he practiced until 1871, when he returned to his former home at Marshall, later forming a partnership with Dr. B. F. Eads. Drs. Pope and Eads were afterwards appointed Chief Surgeons of the Texas & Pacific Railroad. In December, 1872, he was married to Miss Ella Tarleton, who lived not quite a year. He was married to Miss Hattie J. Starr, the daughter of Dr. James F. Starr, former Treasurer of the Republic of Texas, in 1881. In the fall of 1881, while at a wreck on the T. & P. R. R., Dr. Pope contracted a severe cold, which developed into a severe attack of pneumonia. His health remained poor for some time following this illness, and upon the advice of his physicians he went to Mexico, where he remained two years. Upon his return from Mexico he established a sanitarium at Lithia Springs, Georgia, for the treatment of nervous diseases, and while living there his second wife died, in 1890, bearing him a son. He subsequently returned to Marshall, where in a short while his child also died. In 1892 he established a hospital in Marshall, for the treatment of nervous diseases, but failing health compelled him to close this institution in 1896.

Dr. Pope is survived by one brother, Dr. Irvin Pope of Tyler, Texas, and a sister, Miss Lou Pope of Marshall. The Pope brothers have always been prominent in Texas. Judge W. H. Pope of Beaumont, formerly State Senator, was District Judge there at the time of his death in 1913; Judge James W. Pope, who died in 1911, and Hon. Alexander Pope, who died in 1889, were prominent lawyers in Marshall, and Dr. Asa Pope, another brother, was a prominent physician in Marshall.

Dr. Pope did much for the advancement of the medical profession in Texas while in active practice, and until his failing health prevented, he never missed a meeting of the State Medical Association.

Dr. John Hunter Pope.
Twelfth President, State Medical Association of Texas.

He was an earnest advocate, and did great work, in securing the enactment of laws raising the standard of requirements for the practice of medicine in the State. He was of a genial and warm personality, and numbered his friends by the extent of his acquaintance. At the time of his death a friend remarked that if Dr. Pope had an enemy he would be ashamed to acknowledge it, for he would know that it was an unjust enmity. He gave liberally to charity while he lived and left a considerable sum for the same purpose, by the terms of his will.

It can be truly said of him that he was "One who loved his fellow-man."

Dr. Rufus Whitten King of Austin, died August 2, 1915, of arteriosclerosis.

Dr. King was born in Giddings, Texas, December 19, 1875. His father was Capt. R. Y. King, a member of the famous Terry's Texas Rangers, and more recently Superintendent of the Confederate Home at Austin, and his mother was Miss Clifford Whitten of Mississippi. He spent most of his boyhood in Belton, Texas, where his parents moved in 1876. His preliminary education was received in the common schools of the neighborhood, and he took his degree in medicine in the Medical Department of the University of Texas, at Galveston, in 1899. In the

meantime, he served during the Spanish-American War as a hospital steward in the First Texas United States Volunteer Infantry. He was honorably discharged prior to the conclusion of the war, in order that he might finish his college course, which he did. During his senior year, he was accorded the unusual privilege of serving as undergraduate interne in John Sealy Hospital.

Following his graduation, Dr. King located at Creedmore, near Austin, and entered the practice of general medicine. He soon tired of the routine work of the practice of medicine, and took up the study of law in the University of Texas, graduating from the Law Department in 1906. He made a specialty of railroad law and located in Fort Worth, where he practiced with one of the prominent firms of the city for several years. He found the practice of law not entirely to his liking, and again resumed

Dr. Rufus Whitten King.

the practice of medicine, locating at Dundee, Archer County, in the Panhandle, where he acquired many friends and a comfortable fortune. His health began to fail a few years ago, and he removed to Austin, eventually becoming resident physician at the Texas Sanitarium, which position he held at the time of his death. Dr. King spent the last few years of his life in various localities and sanitariums, seeking relief from high blood pressure, which tended to incapacitate him for work, and which was a constant source of concern. Relief was seldom attained, however, and he eventually settled down to work in the Texas Sanitarium, calmly anticipating the end.

Dr. King was married to Mrs. Zona Hawkins (nee Caldwell) of Gatesville, October 22, 1906. His wife survives him. There were no children.

Dr. King was always, and at all times, genial, wholesome and interesting. His honor and integrity were beyond all question. He was eminently successful in the practice of both medicine and law, and his attainments in these two great professions were considerable. He leaves many friends who will not forget him.

BOOK NOTES

Mothercraft. By Sarah Comstock. Illustrated. Cloth, 215 pages, 10-point, double-leaded, on dull-finish paper. Hearst's International Library Company, 119 W. Fortieth St., New York City. $1.00, net.

The writer of this little book says, "The aim of these chapters, which first appeared in *Good Housekeeping Magazine*, is to put into non-technical English, some of the newest teachings expressed by some of the safest and sanest specialists of today; in other words, modestly to act as interpreter.

"The material upon which they are based has been sifted from the teachings and preachings of physicians, teachers, nurses and other specialists, who, in different cities of our country, rank among the highest authorities. I have avoided extremists; I have sought those who lead along the direct and happy path of common sense. This means that they hold to a rational conservatism while they fear no new doctrine which test proves sound. They are moderns, but not faddists."

The book is worth its weight in gold. Not a line is there without its reward for the reader. The closing paragraph of the author is but a fair sample of the value of this volume: "It pays. The happiest woman I know says she won her happiness through talking with her child, playing, dancing, singing, with her child, learning and loving nature with her child—through being, indeed, a child with her child. She says it pays."

After an average lifetime spent in the role of a blundering fatherhood, it is our deliberate opinion that the one thing needful in this world of parenthood is the education of parents in the craft of rearing children. The author has added an excellent list of authorities at the end of the book, but we would suggest, further, the reading of *Parenthood and Race Culture*, by Caleb W. Saleeby, and *Child Training as an Exact Science*, by G. W. Jacoby.

The book is dedicated to Dr. Thomas Denison Wood of Columbia University. A glance at its contents will serve to inspire young mothers, perhaps, to secure and study it. There are eight chapters devoted to The Motherhood of Tomorrow; The Days Before the Stork; Hygeine in the Baby's Wardrobe; Feathering the Nursery Nest; Feeding the New Baby; The Growing Body of Your Child; A Footing for Life; the Growing Mind of Your Growing Child.

It is to be sincerely hoped that all doctors who have not learned the surpassing importance of this subject will secure a copy and read this book. The one aim of medical science is to render people strong and happy, and this work contains much of the essence of that aim.

Senescence and Rejuvenescence. By Charles Manning Child, Ph. D., Associate Professor of Zoology in the University of Chicago. Cloth, 8vo, 492 pages, weight 3 lbs. Price $4.00, postage extra. The University of Chicago Press, Chicago, Illinois, 1915.

Senescence means growing old; rejuvenescence means growing young. The "Teacher in Israel" asked, "Can a man grow young when he is old?" David, the King, had answered him a thousand years before, when he declared "Thy youth is renewed like the eagle's." And Professor Child, building upon the physiological studies of Loeb, his once colaborer, and himself in the laboratories of the Chicago University, has arrived at the same conclusions as did David, who declared that he was convinced that the

Deity had proposed to redeem human life from destruction, crown it with loving kindness and tender mercies; to satisfy its mouth with good things, and renew its youth—that is, that He would lead mankind along a course of living which should restore, not only the taste bulbs, but restore its celularity, restore its somatic tissues, and rejuvenate such as might choose to live according to the laws of life set to govern living matter and its vital functions. These things, David tells us, were "made known unto Moses, and demonstrated to the children of Israel," and rational science has retrieved them, in part, from the regions of lost art, into which perverse humanity had, through ignorance, arrogance, superstition and intemperance, permitted their loss.

Of the book now being considered, we quote from the statement sent with it, as follows:

"Not only to scientific specialists in the subject, but to the average thoughtful man who contemplates the evolution of his own physical and mental life, one of the most vital and mysterious things in the world is the process of growing old.

Old age and the renewal of life have always been questions of the highest interest and significance to the human mind in spite of the baffling nature of the problems involved.

The author of this volume, Professor Charles Manning Child, of the Department of Zoology in the University of Chicago, after some fifteen years of experimental investigation of the nature and origin of the organic individual, has established certain facts which afford a more adequate foundation for the general consideration and interpretation of the age changes in the organic world than we have hitherto possessed.

Certain experimental methods have made it possible, not only to follow the physiological age changes in some of the lower animals, but to learn something of their nature. These animals grow old as does man, but they are also capable of growing young. The process of aging can be retarded or inhibited experimentally, and old animals can be brought back to a condition of youth and made to pass through the life cycle again and again. * * *

The most important result of the investigation is the demonstration of the occurrence of rejuvenescence quite independently of sexual reproduction; and the book differs from most previous studies of senescence in that it attempts to show that in the organic world in general rejuvenescence is just as fundamental and important a process as senescence."

THE PRACTITIONER'S ENCYCLOPEDIA OF MEDICAL TREATMENT. Edited by W. Langdon Brown, M. D., F. R. C. P., Assistant to St. Bartholomew's Hospital and Physician to the Metropolitan Hospital, and J. Keough Murphy, M. D., F. R. C. S., Surgeon to the Mille General Hospital for Southeast London and to Paddington Green Children's Hospital, with an introduction by Sir Thomas Clifford Allbutt, K. C. B., M. D., F. R. S. Small quarto of 874 pages, cloth, $8.00. Oxford University Press, American Branch, 35 W. Thirty-second St., New York, 1915.

The text is divided into two parts—Part I, Methods of Treatment, and Part II, Agents of Treatment. The authors, in the preface, state that "In Part I certain general forms of treatment are dealt with, and then the treatment for the various disorders is arranged in a systematic manner, excluding details of surgical operative measures dealing only with the indications for such measures," etc. In Part II "will be found particulars of the action and use of different drugs, which are arranged in classes. * * * A guide to the practitioner for the principles and methods of medical treatment." The work is dedicated to Sir William Osler and Sir Thomas Clifford Albutt, and is based upon the Pharmacopoea of the United States, with permission of the board of trustees, who are in no way responsible for the accuracy of the book.

This very attractive and well-executed volume will prove of real service to the busy doctor as a book of ready reference to consult when time is scarce. A casual investigation inclines us to accept it as reliable.

DISEASES OF THE NOSE AND THROAT. By Algernon Coolidge, M. D., Professor of Laryngology in the Harvard Medical School. 12mo, of 360 pages. Illustrated. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $1.50, net.

The author, in his preface, says: "The object of this book is to guide the student and practitioner of medicine in his clinical work, by giving him a ready reference to the important details of examination, diagnosis and treatment of the upper respiratory passages. It is not merely a manual; it is an accentuation of the important phases of everyday conditions as they are presented to the busy doctor who wants more than merely to be reminded of what he might already know, but really does not know. It deals with the established facts and well-authenticated theories, it reviews the anatomy and physiology of the different organs as far as they are important in the matter of examination and treatment. The ultimate purpose of the author is to aid as far as possible the acquisition of those ends which are gained chiefly by clinical experience, and for this both the text and the illustrations are designed.

WHAT TO EAT AND WHY. By G. Carroll Smith, M. D., of Boston, Mass. Second edition, thoroughly revised. Octavo, of 377 pages. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $2.50, net.

The first edition of this excellent book was issued four years ago (1911), reprinted in 1912, and again in 1913. It is now before us completely revised, with new chapters on the subjects of exercise and rheumatism. It is a fine resumé of the present status of dietetics, and will prove useful to all who are for any reason interested in the subject. Certainly no practicing physician can afford to neglect so important a subject, and for a clear and definite statement of facts about dietetics there is not likely to be found a better book of the scope of the one here considered.

SYPHILIS AS A MODERN PROBLEM. By Wm. Allen Pusey, M. D., Professor of Dermatology in the University of Illinois. 8vo, 129 pages, cloth binding. American Medical Association, Chicago, Illinois, 1915.

"This monograph is a part of the Commemoration Volume, issued by the American Medical Association at its meeting at San Francisco, June 22 to 26, 1915, as a tribute to the medical sciences, which made possible the building of the Panama Canal and the Panama-Pacific Exposition," and is now sent forth as a small brochure, with the desire that it may be ultimately placed in the hands of the laity, with the hope of promoting human health and social order by at least in some small measure contributing to the prevention of syphilis, by bearing to the public the knowledge of its dangerous character and how to avoid it. It is written more for the layman than for the physician, and the subject is treated not so much from the medical aspects as from the social and economical relations, and as a scourge of humanity involving sanitary problems of the utmost importance, the solution of which must at last be found in the intelligent co-operation of the laity. Therefore, the book will appeal to the layman of intelligence and will command both his respect and aid in the work it is designed to promote.

So far as we are aware, there has been only one

former effort to engage the assistance of the public in the task of preventing syphilis in modern times like this. In November, 1889, in the city of Paris, France, Dr. F. Buret released to the printers his work of three small volumes on syphilis, which were intended for the French public, and written, as he declared, "To those who have it—a very appreciative audience—and, then (to) those who are not affected by it—that is to say, those who run the risk of acquiring it. Do not protest; when you will have read this medico-literary study, if, perchance, you have the courage to go on to the end, you will not dare affirm that you will always be unscathed, for evil, like good, comes upon us while we sleep." Dr. A. H. Ohman-Dumesnil of St. Louis translated this work of Buret in 1891, but so far as we are aware it never reached the American public, simply being printed in the "Physicians and Students Ready Reference Library." It is to be hoped that this little volume of Dr. Pusey's will be successfully placed in the hands of the lay public, and we would suggest, since the Texas State Board of Health has been striving to evolve a scheme for a campaign of publicity along that same line, that the American Medical Association undertake to enlist the Health Department in the circulation of the book in this State, and similar arrangements might be secured with other State Boards.

THE PRACTITIONER'S VISITING LIST FOR 1916. Four styles: weekly, monthly, perpetual, sixty-patient. Pocket size; substantially bound in leather, with flap, pocket, etc.; $1.25, net. Lea & Febiger, Publishers, Philadelphia and New York.

A complete system for recording daily practice. Four styles, 30-120 patients, dated or undated. The text contains scheme of dentition, weights and measures, urinalysis, diagnosis of eruptive fevers, incompatibles, poisons, antidotes, directions for effecting artificial respiration, table of dosage, diseases and their remedies, ligation of arteries, etc. It is beautifully bound, bright red color, good size, and worth the money to those who follow such a system of records.

PRINCIPLES AND PRACTICE OF OBSTETRICS. By Joseph B. De Lee, A. M., M. D., Professor of Obstetrics at the Northwestern University Medical School. Second edition, thoroughly revised. Large octavo of 1087 pages, with 938 illustrations, 175 of them in colors. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $8.00, net; half Morocco, $9.50, net.

The first edition of this unexcelled work on obstetrics was noticed at length and very favorably in the May issue of THE JOURNAL, 1913, page 34. The revision has improved its contents with an amount of new matter, which renders it still more valuable. Some new illustrations have also been added, which makes it more available to both the obstetrician and the student.

Professor De Lee is 46 years old. He graduated at the Northwestern University Medical School, Chicago, in 1891, and is now Professor of Obstetrics in his *alma mater*. He holds a number of other responsible positions as obstetrician and consulting obstetrician, and is a teacher of admitted superiority, devoted to his specialty.

The revision, which was completed in August of this year, is much improved by the enlargement of the chapters on the Abderhalden pregnancy reaction, "twilight sleep," "dry labor," labor in old primiparae, blood pressure and extraperitoneal caesarean section. The author positively condemns the Freiburgh method, known as "twilight sleep." Both by his own observations in private and hospital practice, and after observing the practice in Freibugh, he is convinced of its overwhelming disadvantages. He also declares that in the clinics of Heidelburg, Berlin, Dresden, Munich and Vienna, after thorough testing, it was discarded.

Physically the book is up to the usual high standard of these publishers. The pages are large, the type, eight and ten point, is good, lines leaded, clear, solid paper, binding good, pages lying flat before the reader, giving no necessity for breaking the back open. Those who were fortunate enough to secure the former edition will not neglect to buy this revised edition.

A TEXTBOOK OF PATHOLOGY. By Alfred Stengel, M. D., Professor of Medicine, University of Pennsylvania, and Herbert Fox, M. D., Director of the Pepper Laboratory of Clinical Medicine, University of Pennsylvania. Sixth edition, reset. Octavo, of 1045 pages, with 468 text illustrations, many in colors, and 15 colored plates. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $6.00, net; half Morocco, $7.50, net.

This particular branch of medical science has been undergoing a severe reconstructive period of research for a number of years, and has not yet been brought to a plane of satisfactory certitude; so that each newly written or revised book on the subject immediately secures the attention of the studious practician and the eager undergraduate, as well as the instructors and teachers in our medical colleges. And while there are numerous books in this field of research and technic, this one, issued first in 1898, has since that time undergone five entire revisions and four reprints, so great has been the demand for it. Besides the extensive revision and resetting found necessary to bring the text up to date, a new section on transmissible diseases has been added. The Terata have been incorporated in a new chapter on Teratology; the Glands of Internal Secretion and their pathology have been made the subject of a separate chapter, and new sections on the pathology of the eye, ear and skin, brief and general in scope, but sufficient for a work of this character, have been added. The chapter on Technic has been omitted for the sake of brevity, and the student is referred to the special works on the subject. The chapter on diseases of the nervous system has been curtailed, and wherever the advance of knowledge has rendered it necssary, the text has been carefully altered. More than 100 new illustrations have been added, both in colors and black and white, and the liberal policy of the publishers has been shown in their efforts to make the book all the subscriber could require.

BOOKS RECEIVED.

The Practitioner's Encyclopedia of Medical Treatment. (Oxford University Press.)

Diseases of the Nose and Throat. *Coolidge* (W. B. Saunders Co.)

A Text-Book of Pathology. *Stengel-Fox*, 6th Ed. (W. B. Saunders Co.)

Principles and Practice of Obstetrics. *DeLee*, 2d Ed. (W. B. Saunders Co.)

What to Eat, and Why. *Smith*, 2d Ed. (W. B. Saunders Co.)

Manual of Embryology. *Peterson* (Oxford Medical Publications.)

Senescence and Rejuvenescence. *Child* (University of Chicago Press.)

Infant Health. *J. (Shavnet) Cameron MacMillan* (Oxford University Press.)

Texas State Journal of Medicine

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

MERRY CHRISTMAS.

We wish our readers a merry Christmas. This is a splendid sentiment, and there are many ways of expressing it. No matter how it is said, the central idea is the same, and the "Merry Christmas" has by much usage become classical rather than hackneyed. There is sometimes quite a difference between pleasure and merriment. One may be pleased that a difficult task is advancing satisfactorily, and yet not be merry. It is always a pleasure, however, to be merry. To be merry is to be free of care, with joy unconfined. It is a mental attitude, and rarely is attained beyond the realm of youth. That is why it is such a beautiful sentiment—we are wishing for our friends a return, even for a brief period of time, to the glorious atmosphere of youth; for the youth we are wishing the exercise of nature's greatest gift to mankind.

In the natural order of things, it is perhaps harder for the physician to be merry than for any other profession or class, which is all the more reason why we should make a determined effort in that direction. Burdened with the woes, physical and mental, sometimes moral, of mankind, too often with little thanks and less pay, small wonder it is that we find it difficult to be merry. It will be recalled, however, that the leaders in our great profession are as a rule good story tellers, and away from the shop, essentially genial, hearty and well met. This characteristic of greatness has often been remarked, and it is for the general application of the idea that we wish. If it may not be so through all the days of the year, may we not make an exception of the Christmas Season? At this time we christians celebrate the nativity of the Christ, and we are told in sacred writings that he will relieve us of the burdens of the flesh. For that reason we choose this particular holiday for merriment, and it is our duty as well as our wonderful privilege to be merry.

THE CAUSE AND CURE OF PELLAGRA.

Those of us who had been following Goldberger's investigation of pellagra, were in a measure prepared for the recent startling announcement from the Public Health Service that both the cause and cure of this disease had been discovered, and that as a consequence a dread malady which had been increasing in the United States at a terrific rate during the past several years, might now be checked. The United States Public Health Service estimates that during the year 1915, 75,000 cases of the disease will have occurred, with 7,500 deaths. In view of the fact that the great majority of these cases occur in the South, the announcement from such an authoritative source that the cause and cure has been established, will naturally prove of the utmost interest. According to the estimate above, only tuberculosis and pneumonia exceed pellagra as a cause of death.

Early in 1914, Dr. Goldberger began his studies of pellagra and its relation to diet, in the Georgia State Sanitarium, with the assistance of Dr. Lorenz, and subsequently Dr. Willets, both of the United States Public Health Service, the intention of the investigators at this time being to attempt the cure of the disease with a rich animal protein diet. The results of this effort (Public Health Reports, October 23, 1914,) were most satisfactory, a mortality of 6.6 resulting, under rather adverse circumstances. This effort was supplemented by similar experiments in two

orphanages in Southern Mississippi, with much better results. Whereas there had been a constantly increasing number of pellagra cases in these institutions, upon substitution of the prescribed diet, rich in proteins, the disease practically disappeared, there being recurrence in only one of the previous cases. Other results have been equally as encouraging, and the idea that pellagra is a nutritional disease has become rather firmly fixed in the minds of many.

As a result of these epidemiologic studies, Goldberger and his associates, undertook to produce the disease in human beings by intentional restriction of diet, using for their purposes volunteer convicts on the farm of the Mississippi State Penitentiary, eight miles from Jackson. The experiments were directed by Goldberger and Wheeler, both of the United States Public Health Service, and according to the announcement (released November 12), were entirely successful. Eleven convicts were used, and six of them developed typical dermatitis and mild nervous gastro-intestinal symptoms. The diagnosis in these experimental cases was affirmed by Dr. Galloway, Secretary of the Mississippi State Board of Health; Dr. Nolan Stewart, formerly Superintendent of the Mississippi State Hospital for the Insane, of Jackson; Dr. Marcus Haase, Professor of Dermatology, Medical College of the University of Tennessee, Memphis, and Dr. Martin F. Engman, Professor of Dermatology in the Washington Medical School, St. Louis, all personally disinterested as to the work of the United States Public Health Service. It seems that the nervous symptoms and the gastro-intestinal disturbances began in these cases rather early, but the skin symptoms did not appear until some five months after the beginning of the experiment. Twenty controls were used. There had never been any pellagra in this camp, and none appeared subsequently, except the six experimentally produced. The conclusion is fair, therefore, that the disease in these six volunteers was the result of a one sided diet, on which they had existed during the period of the experiment. The sanitary conditions surrounding the experimental squad were much improved over those of the controls. The diet alone was different. The convicts used in these experiments have been pardoned and are being carefully nursed back to health. The following quotation from the Bulletin issued by the United States Public Health Service may be interesting:

"Prior to the commencement of these experiments no history could be found of the occurrence of pellagra on the penitentiary farm. On this farm are 75 or 80 convicts. Governor Earl Brewer offered to pardon twelve of the convicts who would volunteer for the experiment. They were assured that they would receive proper care throughout the experiment, and treatment should it be necessary. The diet given was bountiful and more than sufficient to sustain life. It differed from that given the other convicts merely in the absence of meats, milk, eggs, beans, peas, and similar proteid foods. In every other particular the convicts selected for the experiment were treated exactly as were the remaining convicts. They had the same routine work and discipline, the same periods of recreation and the same water to drink. Their quarters were better than those of the other convicts. The diet given them consisted of biscuits, fried mush, grits and brown gravy, syrup, corn bread, cabbage, sweet potatoes, rice, collards and coffee with sugar. All components of the dietary were of the best quality and were properly cooked. As a preliminary, and to determine if the convicts were afflicted with any other disease, they were kept under observation from February 4th to April 9th, two and a half months, on which date the one sided diet was begun."

The following is a summary of the food served the experimental squad during one week (Public Health Reports, November 12, 1915):

"Biscuits, 41.81 pounds; corn bread, 24.56 pounds; grits, 27.06 pounds; rice, 24.25 pounds; fried mush, 33.87 pounds; brown gravy, 37.81 pounds; sweet potatoes, 23.62 pounds; cabbage, 4.25 pounds; collards, 23.75 pounds; cane syrup, 5.94 pounds, making a total of 255.67 pounds of food consumed during the week, or 3.32 pounds per man per day, having a caloric value of 2,952 calories per man per day. The sugar was white granulated, the syrup a "home-made" cane syrup. No vegetable fats entered into the diet. The corn meal and grits were of the best quality obtainable in the local market and the same as used at one of the orphanages ("M. J."), Jackson, Miss., at which a feeding experiment to prevent pellagra was conducted and at which no pellagra occurred this year."

The observations appear to be so clear and so authentic as to leave little room for doubt, and the serious student of the disease will doubtless agree that diet has an important part to play in its causation. Whether faulty diet is the actual cause of the disease, and the exclusive cause, or whether it merely predisposes, much as nutritional deficiency predis-

poses to other diseases, remains to be seen. It will be recalled that the several reports of the Thompson-McFadden Commission were fairly indicative of a communicable agency in the etiology of the disease. It will also be recalled that the argument of the zeists, and later on of those who believed with Sambon that the Buffalo gnat, or some other insect, conveyed the disease, were both rather attractive in their day. Indeed, there are many who still hold to these two theories. It is the history of all investigations of this character, that an investigator who has made up his mind in advance can nearly always prove his position to a fair degree of certainty. While we do not believe this to be the case here, for the reason that the United States Public Health Service has assumed the responsibility of urging Dr. Goldberger's findings, notwithstanding that some of its own workmen hold to contrary theories. However, it is now essential that the elements in either the diet or the victim, that are responsible for the incident of the disease, be determined more definitely.

It is also desirable that some effort be made to determine just why the disease has only recently assumed such proportions in regions previously believed to have been clear of its ravages. This in itself is a many sided question, and has been discussed quite extensively of late, with, we believe, nothing definite having been arrived at. It is not sufficient to say that the poor only have the disease, or that the rich sometimes have it. It is a well known fact that where the poor frequently must live on a restricted diet, the rich assume to do so, for one reason or another. One must consider, also, the effect of properly balanced and nutritious diet on other diseases, such as tuberculosis, pneumonia, etc., in which the element of resistance plays such a vital part. The epidemiologic features of the disease may not safely be used as an argument looking to an infection as the cause, unless we shall assume that beri beri is also of infectious origin. Most of the contention against the Goldberger findings are ill founded, but there is still much room for doubt as to whether the whole story as to the etiology of the disease has been told. There can be no doubt, however, that the disease may now be definitely classified as entirely curable, and the wise physician who has a case of pellagra in his care, will see to it that his patient has first of all things, a diet rich in protein and materially lacking in carbohydrates, fats, and perhaps, to make a concession, maize products also, and apply such symptomatic treatment as may be indicated. As to the several treatments offered, which appear to be reasonable in theory and promising in practice, the judgment of the attending physician will still have to be exercised. It is the opinion of many that diet plays the same part in the treatment of pellagra that it does in the treatment of tuberculosis, rather than as in the treatment of beri beri. Still, the effort at specific treatment of tuberculosis may not be held to have been brilliantly successful.

Whatever else may be said, it is quite evident that the country owes a debt of gratitude to the United States Public Health Service, much as it does to the Army and Navy medical services for their sanitary work and the discovery of the cause of yellow fever.

COMMITTEES AND SECTION OFFICERS APPOINTED.

President Dr. Moody announces his appointments for the year, as follows:

SECTION OFFICERS.

Section on Medicine and Diseases of Children.

Chairman, Dr. S. P. Rice, Marlin.
Secretary, Dr. E. V. DePew, San Antonio.

Section on Surgery.

Chairman, Dr. T. T. Jackson, San Antonio.
Secretary, Dr. Edgar Smith, Lockhart.

Section on State Medicine and Public Hygiene.

Chairman, Dr. W. B. Collins, Austin.
Secretary, Dr. J. H. Eastland, Mineral Wells.

Section on Gynecology and Obstetrics.

Chairman, Dr. J. A. Hill, Houston.
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Section on Ophthalmology, Otology, Laryngology and Rhinology.

Chairman, Dr. M. E. Taber, Dallas.
Secretary, Dr. R. B. Sellers, Fort Worth.

Section on Pathology.

Chairman, Dr. Bruce Allison, Fort Worth.
Secretary, Dr. P. I. Nixon, San Antonio.

Section on Life Insurance.

Chairman, Dr. D. J. Jenkins, Daingerfield.
Secretary, Dr. Irving McNeil, El Paso.

COMMITTEES.

Council on Legislation and Public Instruction.

Dr. G. H. Moody (ex-officio), San Antonio.
Dr. Holman Taylor (ex-officio), Fort Worth.
Dr. M. P. McElhannon (three years), Belton.
Dr. Bacon Saunders (two years), Fort Worth.
Dr. Ben H. Turner (one year), Cleburne.

Committee on Optometry Legislation.

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Dr. R. E. Nicholson, Brenham.
Dr. R. W. Dunlap, Palestine.
Dr. E. H. Vaughn, Tyler.
Dr. T. J. Walthall, San Antonio.

Committee on Defectives and Dependents.

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Dr. B. T. Young, San Antonio.
Dr. John W. Preston, Austin.
Dr. T. B. Bass, Abilene.
Dr. G. F. Powell, Terrell.

Committee on Sale of Poisonous Drugs.

Dr. G. H. Moody (ex-officio), San Antonio.
Dr. Holman Taylor (ex-officio), Fort Worth.
Dr. W. S. Carter, Galveston.
Dr. J. H. Graves, Waco.
Dr. W. N. Brooks, Groesbeck.

Committee on Scientific Work.

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Dr. O. L. Norsworthy, Houston.
Dr. G. P. Pipkin, Lancaster.
Dr. H. F. Connally, Waco.
Dr. J. A. R. Moseley, Jefferson.

Committee on Study of Cancer.

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Dr. L. P. McCuistion, Paris.
Dr. Wm. Lee Secor, Kerrville.

Committee on Study of Pellagra.

Dr. B. A. Fowler, Chairman, Brownwood.
Dr. W. T. Wilson, Navasota.
Dr. E. J. Neathery, Sherman.

Committee on Study of Venereal Diseases.

Dr. H. C. Moore, Chairman, Houston.
Dr. F. C. Walsh, San Antonio.
Dr. A. I. Folsom, Dallas.

Committee on Study of Cottonseed Meal as a Food for Humans.

Dr. L. B. Bibb, Chairman, Austin.
Dr. Horace Gilbert, Austin.
Dr. L. L. Edwards, San Marcos.

Committee on Revision of School Text-Books.

Dr. T. J. Bennett, Chairman, Austin.
Dr. Homer T. Wilson, San Antonio.
Dr. W. L. Davidson, Wharton.

Committee on Medical Education.

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Dr. Wm. Stokes, Jacksonville.
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Dr. J. W. Ellis, Lampasas.
Dr. J. E. Rogers, Rock Springs.

Committee on Insurance.

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Dr. W. A. Boyce, Dallas.
Dr. A. J. Gilbert, Hillsboro.
Dr. W. E. Lowry, Laredo.
Dr. J. S. Anderson, Brady.

Committee on Care of Indigent Physicians.

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Dr. C. C. Gidney, Plainview.

Committee on Collection and Preservation of Records.

Dr. Frank Paschal, Chairman, San Antonio.
Dr. J. D. Osborn, Cleburne.
Dr. H. W. Cummins, Hearne.

Committee on Arrangements for the Annual Session.

Dr. Marvin L. Graves, Chairman, Galveston.
Dr. Ed. Randall, Galveston.
Dr. A. W. Fly, Galveston.
Dr. W. F. Starley, Galveston.
Dr. H. P. Cook, Galveston.

Committee on Memorial Exercises.

Dr. Geo. H. Lee, Chairman, Galveston.
Dr. R. B. Jackson, Mexia.
Dr. C. W. Goddard, Holland.

Committee on Scientific Exhibits.

Dr. H. L. McNeil, Chairman, Galveston.
Dr. W. H. Moursund, Dallas.
Dr. C. P. Brewer, Fort Worth.
Dr. G. W. Stone, Waxahachie.
Dr. S. Webb, Jr., Dallas.
Dr. R. T. Goodwin, Sinton.
Dr. L. H. Denman, Lufkin.

Committee on Transportation.

Dr. Holman Taylor, Chairman, Fort Worth.
Dr. Wm. Gammon, Galveston.
Dr. F. R. Ross, Houston.

Committee on Publicity.

Dr. A. W. Carnes, Chairman, Hutchins.
Dr. A. R. Sholars, Orange.
Dr. W. N. Wardlaw, Corpus Christi.

SPECIAL DELEGATES.

Texas Member of the National Legislative Council.

Dr. M. M. Carrick, Dallas.

Texas Representative of the National Council on Medical Education.

Dr. John S. Turner, Dallas.

Texas Delegate to the American Association of Medical Colleges.

Dr. C. E. Cantrell, Greenville.

To Texas Pharmaceutical Association.

Dr. S. A. Woodward, Fort Worth.

To Texas State Dental Association.

Dr. W. F. Starley, Galveston.

To Arkansas State Medical Society.

Dr. W. G. Jamieson, Palestine.

To Colorado State Medical Society.

Dr. E. A. Johnston, Amarillo.

To Louisiana State Medical Society.

Dr. W. J. Pollard, Kaufman.

To New Mexico State Medical Society.

Dr. F. P. Miller, El Paso.

To Oklahoma State Medical Society.

Dr. J. H. Florence, Houston.

President Moody has evidently endeavored to carry out the now thoroughly established policy of working into harness each year many who have before been content to remain somewhat in the background, as relates to the work of the State Association proper. These recruits will be warmly welcomed by the battled-scarred veterans of other days, many of whom would fain retire to the ranks for well earned rest. On the whole, we believe we may honestly congratulate Dr. Moody on his selec-

tions. We are assured that each appointee has personally promised to do his full duty. We sincerely trust these promises will be kept. We have no desire to question the good intentions behind these promises; but if they are kept and kept fully, a record will indeed be established, to which we may point with great pride. The JOURNAL heartily wishes for Dr. Moody and his able staff, a most successful administration, and the plea is here entered that the entire membership rally to their support.

THE SCIENTIFIC SECTIONS.

The new constitution and by-laws went into effect without in any way disturbing the regular order of the scientific sections. The Life Insurance Section, which may be said to have been on trial since its inauguration two years ago, seems to have established itself beyond any doubt. The enthusiasm manifested during its meeting and the series of most excellent papers and discussions resulting therefrom, makes this section a fixture.

The scientific sections of a medical association may be said to constitute the kernel in the nut. It is for the purpose of study and mutual professional assistance that we gather in these annual meetings, and for which we maintain the JOURNAL. It is, therefore, of the utmost importance that the work of the scientific sections be kept on the highest possible level and entirely free from favoritism or political bias. The scientific sections are, by operation of the by-laws, relieved of all legislative function, in order that they may devote their attention exclusively to matters of scientific interest. Petitions, memorials and resolutions pertaining to their work may, and indeed should, originate in the scientific sections, but they must be finally acted upon by the House of Delegates. This is a wise provision, and intended mainly to relieve the scientific sections of any extended discussion which might interrupt their routine, and in order to avoid possible conflicts between them and the House of Delegates. Of course, the House of Delegates is composed of physicians of presumably the same scientific attainment as those who are attending the scientific sections, and it is fair to concede that the advice of any section will be given due weight in deciding any question that has arisen there.

The scientific sections, in addition to their functions already mentioned, in a large measure have in their keeping the scientific standard of the JOURNAL. The papers read before them constitute ninety per cent of the original articles published in the JOURNAL each year, and it is the average worth of these original articles that establishes our position in the world of medical journalism.

The scientific sections owe a solemn obligation to those who expect to attend their meetings, to do what they publish they intend to do, and at the time and place promised. In fact, the published program is a sort of contract entered into between the section and its prospective members, and any violation of this contract must be mutually agreeable, and decided upon by the whole body well enough in advance for everyone to be acquainted with the new order of things. This is too often overlooked, although probably better carried out in this Association than in any other of like scope. Again, no one section may be said to exist for itself alone, and each should be conducted with due regard for the rights of the others. In this connection, we have in mind the thoughtless action of one of the sections at Fort Worth last year, in continuing its session for a period which, by the program, was to be devoted entirely to a general meeting. The attention of this section was at the time called to the fact that it was violating both the letter and spirit of the law under which it was operating, but to no avail. Considerable comment was occasioned by this action, and it is sincerely to be hoped that the incident will not be repeated. If the program may not be depended upon a hiatus will exist and much dissatisfaction be the result.

It is the duty of section officers to see that the laws of the State Association are carried out first, and then that the will of the section receives proper consideration. The laws of the Association are that the section shall convene at the time stated and adjourn at the time stated, and that papers shall have just so much time for presentation, and no more. Likewise with the discussions. Neither the section nor the chairman has any right under the law to extend either one. It should be remembered that the section is under contract to give the last essayist on the program the same right

that the first one has, and it is manifestly unfair to ask him to relinquish his rights under circumstances which will prove embarrassing for him if he should decline to do so.

Section officers and prospective contributors as well, should bear in mind the original plan of operation, which intended that papers presented to the Association through its scientific sections should first be thoroughly tried out and well seasoned by presentation at least to county societies, and preferably to district societies as well. County and district society officers should be constantly on the lookout for exceptional papers, and should advise contributors of such papers to submit them for the consideration of the proper section chairmen. In this connection, the warning is repeated that no paper which has been published, either in a county society bulletin or any other circulating medium, is proper to be read before the State Association, or is acceptable for publication in the JOURNAL subsequently. Those who intend to read papers before the forthcoming annual session should prepare them immediately, submit them to the proper section chairman, and in the meantime get the full benefit of the discussions which will come from county and district society consideration.

It seems that the practice of selecting in advance those who are to open the discussion of the papers on the program, has become fairly well established, and here and there in the printed discussions of these papers, it will be noted are some most excellent additional observations. We trust prospective contributors will bear this fact in mind, and submit with the title of their paper, the names of those who are to open the discussion, and that they will see to it that those selected are furnished copies of the papers they are to discuss well enough in advance for them to properly prepare their respective discussions.

Whether an attempt will again be made to hold a joint session of the scientific sections, depends upon the will of the President and the advice of the section officers. We are sure President Moody would be pleased to hear from our members in that particular.

It is quite probable that sections will hereafter be given more time, except for the Section on Surgery and Medicine which, by resolution, may not run concurrently.

THE COMMITTEES.

In conformity with the new by-laws, the old standing Committee on Public Policy and Legislation has given way to the "Council on Legislation and Public Instruction," consisting of the President and Secretary, *ex-officio,* and three other members whose terms of office will overlap. To this Council will be entrusted all of the matter heretofore, coming under the jurisdiction of the committees it supplants, and in addition to which it will co-operate with the Board of Councilors in directing public health meetings and the like. It will also cooperate with similar committees from other organizations engaged in public health and welfare work, and will decide upon all legislative undertakings of the State Association. It was really intended that this council should displace the Committee on Optometry Legislation, Committee on Defectives and Dependents and the Committee on the Sale of Poisonous Drugs, but the President concluded that it would be better to perpetuate the subordinate committees mentioned through at least this year, in order that the Council might better frame the legislative policy of the Association for the forthcoming year. It will be noted that the Committee on Public Health has been dropped, its function having been assumed by the Council on Legislation and Public Instruction and the Board of Councilors.

The new Committee on Scientific Work will be also launched, and it is presumed that the committees on the Study of Cancer, Pellagra and Venereal Diseases, and the Committee on Scientific Exhibits, will each of them work somewhat under the direction, certainly with the advice of this committee. We judge it to be even within the province of the Committee on Scientific Work to advise with the President and Seeretary in the compilation of the annual program. There are several important points in connection with the scientific work of the Association that will be considered by this committee during the year, and upon some of which, doubtless, the House of Delegates will be called to take action.

In accordance with the new by-laws, several of the committees have been reduced as to number, which is probably better because of the facility with which they can perform their duties by correspondence. Particularly is this

true of the Committee on Memorial Exercises, Committee on Collection and Preservation of Records, and Committee on Care of Indigent Physicians. These three committees are really very closely related, as to their intent and purposes, and it is to be hoped that the profession will rally to their support, and if necessary demand action. The Committee on Optometry Legislation, Committee on Defectives and Dependents and Committee on Sale of Poisonous Drugs, will, as heretofore, operate under the direction of the Legislative Committee, which is a "Council" now, and for the first year will have to do merely with the framing of the policy and the assembling of data for the forthcoming legislative year. Because of the developments in the optometry situation in other states, it is quite likely that a hard fight will again be made to secure an entering wedge of some sort, in the name of optometry and exempting this class of practitioners from the wholesome restraint of our generally excellent medical practice act.

We feel that we should call particular attention to the work of the Committee on Scientific Exhibits. If any one has knowledge of any particularly noteworthy pathological specimen or anything directly relating to the science of medicine, the attention of the committee should be called to the facts in the case.

The need of a stringent law on the sale of poisonous drugs, and particularly those that are habit forming is becoming daily more apparent, and it is to be hoped that the present committee on that subject will be able to make some helpful suggestions to the Council on Legislation and Public Instruction, looking to the formation of such a law.

It is expected that these committees will get to work at once, and that their reports will be particularly full next year. It is through the work of the committees that the House of Delegates is made acquainted with the details of the several subjects to be handled, and except the committees, and the officers of the Association, do their work properly, the House of Delegates cannot expect to always act wisely. None of these committees receive pay for their work, and rarely ever do they even receive their expenses. This fact should be taken into consideration by our membership, and every possible assistance should be rendered, both by suggestion and following suggestion.

PAY DUES NOW.

Membership cards will be ready for distribution by the time the JOURNAL reaches our members, and we trust that there will be a speedy and precipitous demand for them. When it is considered how small the dues, it is quite remarkable that there is always such difficulty in getting them collected and properly referred. According to the Association by-laws, the annual assessment is due January 1st of each year, and if not paid by that time a member so failing stands suspended without further action on the part of the county society or anyone else. However, the county secretary has until March 31st, to make his report, and each member who was in good standing the year before is considered in good standing until this report is received. However, this interpretation has never been tested in the courts, and it is just possible that the ruling would be under court procedure, that the county society secretary is the agent of the State Association, and that a member is actually suspended on the first of the month and is reinstated the day upon which he pays his dues. Such a decision would leave an interval of time in which the said member was not in good standing, and should something occur during that particular time for which the member is sued, the Council on Medical Defense could not extend the services of the Association in his defense. While it is not likely that the matter will get into the court on such a point, and while the Council on Medical Defense will defend any member who is shown to be in good standing when the annual report is received by the State Secretary, provided it is received on time, it is well to be careful. It must be considered that the Council on Medical Defense is in charge of a trust fund, and cannot expend the same except in accordance with the law, which is essentially a contract between the contributors to the fund and those whose duty it is to expend it. There are really very few instances in which there is any excuse for delay in the payment of dues, and we sincerely urge that each member mail his county secretary a check for his dues without further delay.

THE DALLAS MEETING OF THE SOUTHERN MEDICAL ASSOCIATION.

Never before has such a splendid aggregation of physieians gathered together in one body in this State, as were in attendance on the annual meeting of The Southern Medical Association at Dallas, last month. At first glance it would seem to the regular attendant on our State Association meetings, that we were merely having an extra meeting during the year, but with an unusual number of "Guests." Closer acquaintance, however, served to impress us with the fact that almost the entire personnel was considerably above the average and quality of the profession of any single state. That is to say, the atmosphere was more impressively studious and scholarly than is the case on the occasion of a State Association meeting. When one considers that the greater number of those in attendance came either from a great distance or for the sole purpose of being benefited, one can understand how this is. Curiosity and even sociability, exact many things of us, but it is not likely that either will take us across half a dozen states for a three day meeting of any ordinary body.

As a matter of fact, the attendance was in the neighborhood of twelve hundred, and Texas made good her promise to add a thousand members for the occasion. It will be recalled that when the Southern Medical Association was invited to hold its meeting in Texas, it was pointed out that a meeting at this time so far from the center of influence of the Association, would probably prove disastrous, in that the attendance would necessarily be small. It is generally conceded that the attendance on any meeting is very largely from the territory immediately adjacent. In order to overcome this argument, the Texas members promised that a membership would be created for this special occasion, thus insuring the attendance. A thousand new members were promised, and while this appeared to be a large order, comprising as it does practically one-third of our own membership, none of us doubted for a minute that we would make good. We believe the Southern Medical Association is satisfied now that it made no mistake in accepting our invitation, and we know that the profession of Texas has profited immensely from the meeting.

In this connection, we desire to thank the profession of Dallas in the name of the State Medical Association of Texas, for the magnificent entertainment they extended on this occasion. It was a pleasure to those of us who were in a position to attend, and it was a favor to the entire profession, in the matter of reputation among the profession abroad. Our judgment is, that any physician of this State who may happen to run across any of the profession from abroad who attended the meeting, will receive a hearty greeting, and will hear something of the hospitality of the Texas profession. This is worth a great deal, and we feel that we should be duly grateful. The entertainment extended was magnificent, and arrangements were carried out beautifully. The meeting itself was intensely interesting, not only from a scientific standpoint, but from the standpoint of public health, and because of the opportunity those in attendance had of meeting so many of the great men of our profession. Quite a number of largely attended public health meetings were held, which were addressed by such celebrities as Dr. Rodman and Surgeon General Blue, President and President-elect respectively of the American Medical Association, Colonel Ireland of the Army, Dr. A. T. McCormack of Kentucky, President Dr. Dowling, and others.

It is hardly to be expected that we outline the work of this meeting, and we direct those interested to the forthcoming files of the *Southern Medical Journal,* which will contain the transactions and perhaps editorial comment thereon. Perhaps the principal item of interest at this time is the next place of meeting and the election of officers. Atlanta was selected for the one, and the officers-elect are as follows:

President, Dr. Robert Wilson, Jr., Charleston, S. C.; first vice-president, Dr. Holman Taylor, Fort Worth, Texas; second vice-president, Dr. Guy L. Hunner, Baltimore, Md.; secretary-treasurer, Dr. Seale Harris, Birmingham, Ala. (re-elected).

The election of the Secretary-Editor of the State Association is gratefully accepted as an honor extended the profession of Texas, and we feel that the response from our profession will be liberal and enthusiastic.

THE MEDICAL SIDE OF PREPAREDNESS.

Whatever differences may exist in the minds of the people as to the necessity of military expansion in the so-called preparedness movement, there can be no reasonable contention against expanding the medical departments of the Army and Navy to the extent necessary to care for the additional number finally decided upon. There seems to be an idea among

our people that soldiers are just naturally healthy, and that in time of peace very few medical officers are required. They forget that troops are healthy beeause, in the first place, they are carefully selected from among perfectly developed men, and in the second place, medical officers see to it that the latest and best in hygiene and sanitation is incorporated in the regulations governing them. Even so, it develops that the medical department at the present time is under-officered, much as the other departments are, with the difference that a military officer in time of peace may well be dispensed with, whereas the medical officer may not be so easily spared. Our army is designed merely as a nucleus for the accumulation of an army many times its size, should war come upon us, and while such expansion is known to real students of military affairs to be thoroughly impractical, a moment's thought will demonstrate to any reasonable person that such a sudden expansion of a department so highly technical as that under discussion, would be out of the question. Many of us recall, and some of us rather emphatically, what a disastrous situation arose when a very moderate expansion of the medical department of the Army was attempted in 1898. Volunteer regiments were officered by medical men who had for the most part seen no service, and who had really not anticipated what military service was like, and there were not enough trained medical officers in the entire army to anything like leaven the lump. When it is still further considered that only the number of officers required in time of peace were commissioned, the wonder grows that the disaster was not much greater. Fortunately, there was very little fighting to be done, and the worst situation to arise was the multiplied typhoid, dysentery and other avoidable infections, such as most of the medical officers had been already contending with in private practice for many years. We can hardly conceive of the extent of the disaster that would have surely arisen had we been confronted with war conditions such as exist in Europe today. At that time, and even now, the medical officer had very little authority, certainly not the amount required for the best results, and the army suffered then and will continue to suffer accordingly. Unless somebody goes to thinking and think hard and fast, we are likely to see a repetition on a scale much magnified of the senseless slaughter of the innocents, which occurred during the Spanish-American War, all because of medical unpreparedness.

Rising to the occasion, the Southern Medical Association at Dallas recently, enthusiastically and unanimously adopted a set of resolutions calling upon Congress to increase the Medical Department of the Army in accordance with any increase in the personnel thereof, and President Moody, in response to the request of President Rodman of the American Medical Association, is asking county societies, and all others who will do so, to petition Congress to the same effect. At present the Surgeon General of the Army estimates that the proportion of medical officers to the enlisted strength should be at least seventy-five one hundredths of one per cent (.75%). This would appear to the laymen to be a fair proportion in time of peace, but it is evident that even such a number would be inadequate for distribution among the medical officers of the great volunteer army which would have to be organized in the event of war.

And let it not be thought for a moment that a surplus of medical officers will be a waste even in time of peace. Consider the service the army and navy medical officers have rendered to the cause of preventive medicine in general, in the discovery of the cause of yellow fever and in many other ways not necessary to mention here. The thought comes to us that perhaps it would be a good idea to provide even a larger number of medical officers, and let them unite their efforts with those of the United States Public Health Service, the various State health services and even municipal health agencies, in searching out the cause of disease and investigating sanitary conditions in general throughout the country. It would be money well spent.

Let us by correspondence and otherwise, impress these points on our Senators and our Congressmen without delay.

ADVERTISING THE ADVERTISING BUSINESS OF THE JOURNAL.

The Titus County Medical Society recently circulated among its members communications in envelopes, on the back of which was the following legend: "Do you read the advertisements in the TEXAS STATE JOURNAL OF MEDICINE?" We are very grateful for this help. We mention it at this time not only because we appreciate the assistance rendered, but because it is so timely. Just now the great advertising agencies and those commercial enterprises which expend thousands of dollars each year in advertising propaganda, are considering the distribution of their several annual appropriations, and there is hardly a one of them but would gladly buy space in the JOURNAL if they thought our readers paid attention to the advertising pages, and they had anything respectable to offer. We have never yet asked an advertiser to take space except he could be convinced that it is or will soon prove to be, a paying investment. We desire to repay every obligation we are under,

whether it be to advertiser or reader, and we would hesitate to enter into any relationship which would deny us this privilege. Indeed, the Board of Trustees will not permit us to accept any advertising not entirely appropriate, and for which we cannot make due returns. It is well known, of course, that we cannot accept advertising that is not respectable in every particular, judged not only by our own standards, but by the standards set by others, that we may not allow prospective income to bias our opinion.

We will appreciate from whatever source, such assistance as that rendered us by the Titus County Society.

RED CROSS CHRISTMAS SEALS.

Press dispatches tell us that the National Association for the Study and Prevention of Tuberculosis, has printed and distributed over 200,000,000 Red Cross Christmas Seals. Proceeds of the sale of these seals will be expended in the fight against tuberculosis in the communities where they are sold, the National Association retaining such proportion as may justly be claimed for the purpose of keeping up the fight on a national scale. To date we have heard little about the sale of these seals in the State of Texas, but we presume they will be offered as heretofore, and we desire at this time simply to call attention to the fact that the project is a most worthy one, and entitled to the moral and financial support of the medical profession. We feel that it is hardly necessary to say more.

THE PHENOMENAL LAFAYETTE IN CALIFORNIA.

Reliable information comes to us that Dr. J. Lafayette Berry, formerly of Texas, is at the present time covering the State of California with a vaudeville show and a series of short lectures on "Bloodless Surgery," with suitable demonstration in full view of his audiences, presumably displaying his wonderful medical powers, and offering them his services, graciously sacrificing his time and talent to the welfare of the (credulous) suffering public. It will be recalled that the self-styled phenomenal Dr. J. Lafayette Berry was convicted in San Antonio, in 1910, for practicing medicine without a license, full editorial reference to which appeared in the April JOURNAL of that year. The experience of this same gentleman before the courts in Jefferson county is also on record, in the March number, 1910, in the Miscellaneous Department. It may also be recalled that the JOURNAL was sued for quite a large sum for libel in reporting the San Antonio trial, above referred to, and that the suit was thrown out of court when Dr. Berry left the State immediately upon hearing that the higher court had upheld the decision of the lower court in his case. It is to be hoped that the California authorities will find a way to handle this case as effectually as it was handled in Texas.

ANTICIPATING THE NEW AMERICAN MEDICAL DIRECTORY.

A recent circular informs us that the fifth edition of the American Medical Directory is now in course of preparation and will be ready for distribution early in 1916. We presume these circulars are being sent to the medical profession throughout the country as rapidly as possible, and our purpose at the present time is to call attention to the necessity of seeing that the data relating to each of our members, and to the profession of the State generally, is accurately printed—which is in the interest of both the individual and the publication in question. Incidentally, it should be borne in mind that the directory will show who are at the time of its publication, members in good standing of their State Association, and fellows of the American Medical Association, and those of our members who are now in arrears, or who may perchance fail to promptly pay their dues for the forthcoming year, to have a care that the directory does not show them as non-members. It will not suffice to reinstate after the edition has gone to press, for that information will not receive the same distribution that the directory will.

The American Medical Directory is the only directory published that gives non-subscribers full data, or in which the data is carefully checked against permanent records. This is a matter of considerable importance. Reliability in such matters cannot be purchased for a price, and neither can data, the insertion of which is paid for by the subscriber, be considered absolutely reliable. It may be urged further, that the American Medical Association publishes this directory not as a money-making proposition, but in the interest of reliability in a matter of considerable importance. The Association cannot afford to give any of these books away, but it will sell them practically at cost to those who will subscribe in advance. The loss in an adventure of this kind lies largely in the surplus necessary to be published in order to meet future demands. We strongly advise prompt attention to all requests from the editors of the Directory, and that as many of our members and county societies as may have need of the information contained, subscribe for the book in advance. This is not an advertisement, and such publicity has not been requested by the management. We refer to the matter simply for the good of the order.

ORIGINAL ARTICLES.

NEUROLOGICAL CASES IN THE PRACTICE OF OPHTHALMOLOGY AND OTOLOGY.*

BY

JOSEPH C. BECK, M. D.,

CHICAGO, ILLINOIS.

I am going to discuss many subjects commonly treated by the neurologist and that is precisely the purpose of this paper. I expect to show how intimately the Ophthalmologist and Oto-Laryngologist is associated with the Neurologist. I have found the neurologist indispensible in my practice and since consultation is not practicable, because so many of our routine cases require a neurological examination, I have had one of my associates, Dr. Frank J. Novak, Jr., trained to make a thorough neurologic diagnosis in every case that warrants such a procedure. If then difficulties arise, and they actually do arise in many cases, we call in as consultant a specialist in neurology. In order to be able to make a fair analysis of a case it is important to have a perfect knowledge of brain localization, the cranial nerves, and the interpretation of symptoms from the involvement of such localities. I have, therefore, prepared some lantern slide illustrations which at a glance help out very much in diagnosis.

It is not my intention to go into detail on all the subjects under consideration, but simply to touch upon the salient points, report one case of each of the conditions in detail and then summarize in each instance from my personal experience. I wish, however, to dwell especially on two of the affections, namely, of the facial and trifacial nerves, of which I shall cite a number of cases, with the intention of showing the relief obtained from permanent facial paralysis by nerve anastomosis, and from distracting pains and tic dolorus by operation and alcohol injection of the Gasserian ganglion and its peripheral branches.

1. Headaches.—Headaches are really symptomatic rather than a disease *per se,* and are present in practically every condition that I am considering today. To the ophthalmologist as well as to the oto-laryngologist, headaches are a very important symptom of the diseases they treat, and in most instances they are the main complaint of the patient. There are many varieties of headaches, as to etiology, character and localization. I shall not attempt to classify them nor even to go very deeply into the subject of even those headaches with which we have to do. Suffice it to say, that it is absolutely imperative that we know all the conditions that may cause headaches, and that we be able to state that the headache in question is a symptom of the condition we are treating.

The local conditions with which every eye, ear, nose and throat man has to deal, and which make up the greatest amount of his routine work, in which headaches are the prominent symptoms are, (1) the refractive and external muscle anomalies of the eye; (2) nasal and nasal accessory sinus disease, and (3) middle ear and mastoid disease and their complications. These headaches, of course, have their characteristics as to location, intensity and periodicity, all of which are well recognized. The headaches which are associated with intracranial complications or diseases, have also their individualities but one of the characteristics common to all is the marked severity of the ache. It is the one symptom that has scarcely ever left me in the lurch; I mean the constant, intense pain or ache, either localized or diffused.

I would like to make a suggestion as to the philosophy of headache, which I believe is of some practical value. I would say, "that no matter what the cause of a headache or head pain may be, the local effect is always the same," namely, the irritation of the sensory nerves of the head. These are branches of the trifacial, the pneumogastric and upper cervical nerves. So it is that a patient suffering from constipation has a headache, which is brought about as follows: The resultant acute copraemia or toxaemia, causes an irritation of the vasomotor nervous system, either a stimulation of the vaso-dilators or paralysis of the vaso-constrictors. This in turn causes a congestion of the head, especially the nasal mucous membrane, and that of the nasal accessory sinuses. This congestion in its turn causes pressure on the sensory nerves, thus producing the headache. Or a patient has a nephritis or diabetes with considerable albumin and sugar circulating in the blood. These substances are a direct irritant to these sinuses and a secondary irritant to the sensory nerves, again producing the headache. And so on, with an intoxication which will result in a congestion of the mucous membrane. Of course, not only the mucous membrane of the nose and sinuses may thus be involved, but any structure about the head supplied by sensory nerves, such as the muscles,

*Read by invitation before the Section on Ophthalmology, Otology, Rhinology and Laryngology, State Medical Association of Texas, Fort Worth, May 4, 1915.

EDITOR'S NOTE: Because of the limited space available for its publication, the author has omitted portions of his paper and numerous cuts relating to the whole text. The article will be published in the form of a monograph, including the omitted portions and the cuts, by the Chicago Record Press, 2113 So. Western Ave., Chicago, to whom those of our readers who are interested will please apply for reprints.

serous membrane and the sheath of the nerves, all of which will irritate the sensory nerves and cause these headaches, but by the very opposite cause, namely, anaemia or ischemia. It is very common to find a headache associated with the various diseases in which anaemia is a prominent symptom. The long continued local application of adrenalin or other substances causing anaemia or ischemia, will frequently cause headache.

I wish to call your attention to the interpretation on the part of the patient, of a headache as to its character and severity. For instance, I have had patients say they had headache, when in reality they had head noises or there was simply a fullness in the nasal accessory sinuses, and middle ear. Or, in another case, the patient had a neuralgic pain from a tooth, of an intermittent character, and called that a headache. We must also admit that there is a great difference in individuals, as to toleration of aches and pains. We see that well illustrated in operative work on the nose and throat; for instance, one patient will have an operation such as a septum resection or middle turbinectomy and never whimper, and another will complain entirely out of proportion to the pain produced. The explanation may be two fold; first, that it is purely mental, and second, that the sensation is much more acute in different individuals, either normally or through the pathological changes that have taken place.

One large group of headaches and head pains that the general practitioner as well as every specialist, particularly in our branch, has to contend with, is the headache that cannot be accounted for after the most thorough investigation, and is diagnosed as a neurosis, hysterical, functional or what not. These are the patients that try us severely and I wish to acknowledge that my efforts with this group of cases has been almost universally a failure. They are a willing lot, are very frequently operated upon in the nose and accessory sinuses, refracted and re-refracted, lenses prescribed and frequently changed, all without any permanent benefit. I have recently made an investigation of a fairly large number of these patients that have passed into the hands of other physicians and into the hands of various faddists, such as Christian Scientists, etc., and have found that in a majority of the cases the patients have given up complaining, or treating, and have sort of resigned themselves to the fact that they cannot be cured.

This observation has led me to believe that when one has done all he possibly can do to make a correct diagnosis and has tried to relieve the sufferer of these headaches, one should assume the attitude of Politzer in the treatment of the socalled incurable head and ear noises. Knowing that there is no scientific method of removing these noises (in this case the pain or ache), knowing the ways of such patients in going from doctor to doctor without any benefit, and knowing that as time goes on the patient becomes tolerant to such noises, he (Politzer) recommends a placebo, which is the nearest any of us can come to doing good. Keeping strict record of it, and having the patient return after a period, say of one month, when another placebo, possibly only disguised by syrup, is prescribed and the patient asked again to return, with an interval considerably lengthened—instead of one month, two months, also figuring out carefully that the patient has enough of medicine to last that long. This treatment is repeated, except that the time of return is constantly lengthened, when finally the patient is resigned to his fate. This method of procedure has brought a great deal of adverse criticism, even couched in strong terms, as being unethical and dishonest; but a much greater number of believers of such methods are daily being recorded, and I am with them in any incurable condition, particularly in the management of this form of headache and pains.

Recently the neurologists and psychiatrists have devoted considerable time to treating this class of cases by what is termed "psychoanalysis" following the school of Freud, and claim remarkable results from such procedures. I am not in a position to verify these in my practice. The work is very interesting, but I do not believe it is practicable.*

2. *Brain Tumor.*—This subject has until recently been in the hands of the neurologist and general surgeon, but now the ophthalmologist and oto-laryngologist has come into his own. A number of cases of brain tumor have already been recorded in the oto-laryngological literature, which have been operated upon by surgeons in this branch and I am looking forward to similar reports from the ophthalmologists. Owing to the fact that the early symptoms are frequently shown in the eye, either as a choked disc or paralysis of some of the extrinsic or intrinsic muscles, or as mentioned before, the symptoms of headache, such patients usually consult an ophthalmologist first. Again, since a large number of brain tumors are found in the auditory nerve intra-cranially, or at the pontine cerebellar angle, and since these produce symptoms referable to the ear, as loss of hearing or irritability of the labyrinth, the oto-laryngologist is frequently first consulted. It stands to reason, therefore, that the ophthalmologist and oto-laryngologist should also be in a position to take care of these cases. There is a type of brain tumors which concerns the ophthalmologist and oto-laryngologist, both in

*Case reports and summary to be found in the monograph.

diagnosis and treatment, that has, especially here of late, created quite an interest. I have reference to the hypophysis tumors and cysts. The ophthalmologist meets the earliest symptoms, those of temporal or bi-temporal hemianopsia, and the laryngologist has established a route for operative interference by way of the nose, that has materially changed the prognosis of this condition.*

The pathological entities of brain tumors are of considerable interest and importance in the prognosis and treatment. Probably the greatest number of brain tumors are solitary or multiple gummata. The next in frequency are sarcoma, fibrosarcoma and glioma. The prognosis of the syphilitic tumor is much more favorable than the other types, especially when attacked vigorously and early by modern measures. In the other forms, the prognosis depends much upon their location. Certain areas are absolutely prohibitive of exploration or any attempt at removal. I have reference to tumors of the base of the skull, in about the middle fossa. In such instances it is customary to be satisfied with decompression designed to save the sight, relieve pain and prevent further destruction of brain tissue. There are occasions in syphilitic tumors, when rapidly forming papillitis also calls for decompression in order to save sight, the antiluetic treatment to follow, rather than the reverse.†

3. *Brain Cysts.*—These are usually classed as brain tumors, since they give the same symptomatology and call for the same treatment, namely, an operation. The only difference is that one may expect a much easier means of obtaining a cure by way of puncture and subsequent obliteration by packing. The great trouble is, the possibility of a recurrence. The cause of brain cysts is not known, but there is in many cases a history of severe trauma about the head, which probably caused a primary haematoma, which has subsequently softened and formed the cyst.†

4. *Sinus Thrombosis, Brain Abscess and Meningitis.*—These conditions have been under the control of the oto-laryngologist for some time, owing to the fact that in the majority of the cases they are secondary complications of a suppuration of the nasal accessory sinuses or mastoid process. Since the masterly work by MaCuen of Glasgow, appeared, the oto-laryngologist has anticipated the possibility of doing good in the early diagnosis and surgical intervention of sinus thrombosis, brain abscess and meningitis. Not a small part of this work has been the prevention of these complications by operative work on the nasal accessory sinuses and the mastoid, before any symptoms appear, or upon the slightest indication of irritation of the intra-cranial structures. The method of diagnosis of these complications has attained such perfection that today a faulty diagnosis is the rarest occurrence, and what is more, owing to the perfection of the operative technic, particularly about the mastoid region, the management of these intra-cranial complications has reduced the fatalities of extra dural brain abscess, sinus thrombosis and serous or localized suppurative meningitis, to a marked degree. This is due to one fact in particular and that is, that one follows the mastoid or sinus route, rather than, as a general surgeon does or did do, making exposures in healthy regions.

It will be noted that I did not mention genuine brain abscess and diffuse septic meningitis as being favorably affected by an operation. The former is not as grave as the later. If a brain abscess has lasted for some time and has made for itself a barrier in the form of a wall, then proper drainage may result in a cure; however, many cases result in secondary diffuse septic meningitis, with the same end results. Lately, brain abscesses are treated in a two stage operation, making the decompression over the suspected area without opening the dura, opening the dura and draining the abscess a few days later, thus lessening the chances for development of a diffuse septic meningitis and cerebritis. Since I have adopted this method I have been better satisfied; however, the results are far from encouraging. In regard to the treatment of diffuse septic meningitis, I wish to say that thus far I have had but one case that recovered and in that one, although we had the pneumococcus in the cerebro-spinal fluid, I am inclined to believe that it was either a localized affair or that it was a serous meningitis.

The spinal puncture, with complete chemical analysis, serologically and cytologically, has aided the diagnosis and treatment of meningitis tremendously, as it has most of the forms of cerebro-spinal lues. Spinal punctures frequently repeated, must be looked upon as a greater therapeutic agent than has heretofore been the case and I have had the satisfaction in several instances, especially in serous meningitis, not alone to relieve the patient of the great suffering from the headaches, but to actually see the case terminate favorably. In the operative procedure for meningitis, Haynes and Kopetsky have advocated a drainage of the cerebral region from the water bed, by what is termed the opening of the cisterna magna, an opening being made very close to the posterior margin of the foramen magnum. The results from this procedure have been uniformly bad, but it is explained that most cases

*Case report, summary and technic of operation, to be found in the monograph.

†Case report and summary to be found in the monograph.

were operated upon too late. I have operated by this method in several cases but only one patient has lived, and that was the one already mentioned as the pneumococcus infection following a lateral sinus thrombosis. I might say, in passing, that sinus thrombosis, even when the jugular bulb and vein are involved, gives excellent prognosis when operated early, before the process has extended through the petrosals to the cavernous sinus, or before multiple infarction with a marked septico-pyaemia has set in. A question that is still unsettled is the ligation of the internal jugular vein. I have had and have seen other cases recover from septic sinus thrombosis without ligation, yet I have in the past ten years seldom, if ever, failed to ligate the internal jugular and its contributary branches, and in many cases even resected the vein, feeling more secure.**

Malformation of the Skull.—One of the interesting studies that I have made, was the examination of the eyes, ears, nose and throat, as well as the intra-cranial structures, in these cases. The various malformations to which I refer are:

1. Internal or external hydrocephalus (waterhead).
2. Microcephalus (small head).
3. Macrocephalus (large head).
4. Oxycephalus (tower head).
5. Procencephalus (double head or meningocele).

All of these five conditions are practically incurable, yet a decompression and other operations about the head and spine have saved the sight and hearing in some of the cases. I call your attention to these facts simply that you may be on the lookout for them.

THE GANGLIAE.

One of the most interesting anatomico-physiological studies, is that of the various ganglia of the cranial nerves and sympathetic nervous system. This is a subject large enough in itself and certainly not within the province of this paper, yet I cannot see how I can leave it out entirely, especially in considering pain in the head and facial nerve disturbances.

Sluder's contribution in connection with the spheno-palatine ganglion; James Ramsey Hunt's, in connection with the geniculate ganglion: Haskins', in connection with the intimate association of the sympathetic nervous system, especially within the cranium and neck, and the various cranial ganglia: Krause's, Hartel's and Cushing's, with the Gasserian ganglion, have, it must be admitted, contributed a great deal to the clinical side of the question. The syndrome of spheno-palatine irritation, as described by Sluder, is very characteristic. Although Otto Stein first called attention to alcoholic injection into the nasal nerves and spheno-palatine injections in hay fever, it remained for Sluder to clearly outline the management of the spheno-palatine ganglion, as well as the sensory nerves in close proximity to the sphenoidal sinus.

In regard to the control of true trifacial neuralgia, it is to Hugh Patrick that credit must be given for fervently advocating injecting with full strength alcohol, the nerve trunks, namely, the second and third branches of the fifth nerve, at the base of the skull, after they escaped through the foramen rotundum and foramen ovale. This still left the ophthalmic branch untouched. Harvey Cushing, modifying the technic of Hartley-Krause resection of the Gasserian ganglion, performed a large number of resections of this ganglion with very satisfactory results, thus reaching all the branches of the fifth. Frazer's operation on the post-root of the Gasserian ganglion, is spoken of by this author as successful. My personal results from the alcoholic injection of the large nerve trunks at the base of the skull, as well as the Cushing method of Gasserian ganglion resection, were not followed by as happy results as from injecting the Gasserian ganglion with alcohol.

In 1913, at the Surgeon's Congress of North America, in Chicago, Cushing presented his results from Gasserian ganglion resection and stated that he believed there would be less resection of the ganglion and more injections with alcohol, in the future. Chas. Metcalf Byrnes, has recently reported on the successful injection of the Gasserian ganglion in fourteen cases of true trifacial neuralgia. In looking up the literature I find that 286 cases of Gasserian ganglion injections have been made, with uniformly good results. In discussing the treatment of the trifacial nerve, I desire to do so as follows:

1. Locally. (a) Direct. (b) Continuity of structure.
2. Systemically. (a) Remove the cause. (b) Symptomatically.

By direct method of treatment, I mean either to remove the ganglion and nerves or inject them with nerve destructing or benumbing substances. Beginning with the Gasserian ganglion, it has already been mentioned that Krause and Hartley have been the pioneers in its removal, but the improved method of operation belongs to Cushing, whose technic I have followed.*

The second mode of treating the Gasserian ganglion locally is to inject alcohol into it.*

There is an immediate reaction in the form of a head pain which radiates towards all the branches of the fifth nerve. This pain lasts from two minutes to an hour. In one case I had a marked collapse that lasted for about ten

*Technic, case reports and summary to be found in the monograph.

minutes, with a complete syncope, very thin pulse and vomiting; but all these symptoms disappeared and the results were the best I had thus far obtained; there was complete and permanent disappearance of the pain. I have injected four patients with true, severe form of trifacial neuralgia, making seven injections in all. The longest any case has been free from pain is a little over two years. Neuroparalytic keratitis can be prevented by protecting the eye for several weeks.

In regard to the direct treatment of the superior and inferior trunk of the fifth nerve by means of alcohol injection, I will say that I have followed the accepted technic, sub-zygomatically. I have injected twenty-seven cases, making forty-nine injections in all. The results are about fifty per cent of cures, that is, non-recurrence of the severe pain.*

In regard to the removal of the nerves, the operation of neurexairesis or pulling the nerve out, I wish to state that that procedure is rapidly falling by the way-side, since the injection of the ganglion and trunks has come into vogue. I will, however, describe the technic that I have followed in these procedures.*

The alcohol or ozmic acid injections, at the free foramina, namely, the supra-orbital, infra-orbital and mental, are not practiced much at this time, because poor or no results have been obtained. The same is true of the removal of the terminal ends of the nerves at these localities.

The work of Sluder, in regard to the medication of the sphenoid sinus by means of oil of wintergreen, salicylic acid, carbolic acid and alcohol, for the relief of neuralgic pains from the upper two branches, is well known to you and all I wish to add is to strongly advocate its use. The only trouble is that the tissues, the soft as well as the bone, are at times so thickened as to prevent the medication from easily penetrating and attacking the nerves. Much different is the condition in regard to the spheno-palatine ganglion. I have followed Dr. Sluder's technic in every particular, and have seen some excellent results from the injections. I have injected nearly fifty cases with but two mishaps. One of these was a blood suffusion into the lower eye lid, and the other a secondary hemorrhage, five days after injection. Both recovered. One must not assume that one injection always suffices; in some cases I have made three injections before obtaining a good result.*

The most important method of relief of head pains, because of continuity of structures, is the removal of pressure or irritation points. This is the work of the rhinologist and dentist. Resection of a high deflection of the septum, middle turbinectomy and ethmoid curettage, opening of the other sinuses, etc., and proper attention to the teeth, are some of the most potent therapeutic measures to bring about cures. Local application of mild astringents, ventilation and drainage of the sinuses by topical application, relieve another large group of cases. One should not forget to mention the harmfulness of the use of cocaine solutions for these purposes. The same is true of the constant use af adrenalin on account of the starvation of the tissues from ischemia, thereby predisposing to infection. Local application of the galvanic current, high frequency and diathermia, have relieved quite a number of our cases, especially those of post operative conditions.*

Systemic Treatment.—In the beginning of my paper I mentioned that many general conditions, such as chronic septic intoxication, chronic alcholism, malaria, nephritis, diabetes, etc., will often cause a neuralgia, and these general conditions, of course, must have the strictest attention. Hygienic and dietetic treatment is of the utmost importance. The term chronic septic intoxication, has reference to the possibility of a chronic focus of infection. As to the systemic, or rather symptomatic, treatment by the analgesic remedies, pyramidon has been my favorite, in five grain doses every two hours. Morphine and heroin is at times necessary in the severe forms. Dana's treatment by means of increasing doses of strychnia, up to toxic toleration, and Gussenbauer's long continued use of castor oil, are well known to all.

The Facial Nerve.—In the study of facial nerve affections, we must divide them anatomically, as, (a) central; (b) peripheral.

Central involvement may be anywhere between the cortex and the internal auditory meatus. Peripheral, from this latter point to its terminal branches on the face and neck. The affections within the cranial cavity are those usually seen by the neurologist, since other nervous phenomena are present, especially the involvement of other nerves. It is, however, very important for us to know these associated nerve symptoms, in order not to treat the case from the peripheral or otological point of view.

The peripheral type of facial nerve involvement may be due (a) to systemic causes, (b) local causes. One type frequently spoken of as a Bell's palsy is, I think, more frequently of a secondary toxic condition, the same as a neuralgia, than anything else. However, one should not overlook the possibility of an acute inflammatory process extending through the Eustachian tube and affecting the facial nerve

*Technic, case reports and summary to be found in the monograph.

*Technic, case reports and summary to be found in the monograph.

in its passage through the fallopian canal. The patient may. not complain of nose or ear symptoms.

This condition of paralysis is usually of short duration and perfect recovery results. However, I have had cases that were very stubborn and never completely recovered. I believe that these protracted cases are the second type of cases first described by James Ramsay Hunt. He claims that it is a disease of the geniculated ganglia. There are usually other symptoms besides facial paralysis present, such as trifacial neuralgia, tinnitus aurium, vertigo and herpes zoster oticus. I also believe that this condition is one of systemic cause, particularly secondary to some chronic focus of infection.

The type of facial paralysis that is of particular interest and importance to us, is that associated with frank ear conditions. The first is that in connection with a violent acute otitis media purulenta, especially of the streptococcic mucosus type. Here the facial nerve paresis is associated with marked labyrinthine symptoms. The earliest possible surgical interference, in the form of a simple mastoid operation, is followed by very good results as to the facial paralysis. The next form is the one associated with chronic suppurative inflammation of the middle ear. It is usually a cholesteatomatous process with necrosis. The labyrinth, especially the horizontal semicircular canal, is very frequently involved in the process and the hearing is practically abolished. These are the most difficult cases, owing to the fact that in order to relieve the paralytic condition it is necessary to remove the diseased process of the labyrinth, and that may leave the facial nerve nonsupported by any bony framework, which is impossible for its sustenance. The third variety of peripheral facial paralysis is the traumatic, most frequently met with in connection with fractures of the base of the skull. This is due to fractures through the petrous portion of the temporal bone. These paralyses are usually permanent although the majority of the patients die from a complication of septic meningitis. The fourth variety of peripheral facial paralysis is that following the mastoid operation, usually the radical. One will remember that if the paralysis comes on as soon as the patient comes out of the anesthetic, the nerve has either been severely injured or severed, whereas if it comes on a few hours or a day or two after operation, it is due to a secondary inflammation in some of its exposed area or reactive inflammation in the bone. The prognosis of this later condition as to ultimate recovery is fairly good, although it may take some time, while the paralysis coming on right after the operation is usually permanent.

A statement made once by a prominent otologist, as to the occurrence of facial paralysis, is as follows: "The operator who seldom or never has a facial paralysis following the mastoid operation is one that usually did not have much experience or opportunity of operation for mastoid disease."

In this connection, I wish to make the statement that in the sixteen years that I have been doing this line of work, I have had but one case of facial paralysis following the radical mastoid operation. In that particular case the facial nerve recovered its function spontaneously, although it took several months. Incidentally, it was the first case I operated upon in my private practice for the cure of chronic suppuration.

I have seen, however, many cases of the various forms of facial paralysis and have had the opportunity of correcting permanent facial paralysis by nerve plastic or nerve anastomosis operations. Nine years ago I reported before the American Laryngological, Rhinological and Otological Society, seven cases of nerve anastomosis for cure of facial paralysis, and since then I have had five more. The results from these twelve hopeless cases were three cured, in that they had independent action of the face; two improved, and seven unimproved. The seven unimproved cases were really not suitable, since the paralysis in six of them had lasted for years and there was marked muscular atrophy present. The question is often asked, how long should one wait before advising the nerve anastomosis operation following facial paralysis? In answer, I would say that one should constantly watch for improvement and test by the galvanic current the reaction to degeneration of the muscles of the face. As long as one obtains the characteristic slow "worm action" movement of these muscles at the opening of the current, one may expect recovery without operation, but as soon as that action does not take place, it is time to advise the operation, since it can be considered a permanent facial paralysis. The longer one waits after that, the slower will be the return of the function, even though a perfect anastomosis has been accomplished.*

ABSTRACT OF DISCUSSION.

Dr. E. H. Cary of Dallas said he was interested in the whole subject, particularly the discussion of headache. He has well covered the whole question. He said that recently a patient came into his office with headache and paralysis, which was relieved by the decompression operation. He thinks we should run down every phase of this symptom. Errors of vision are responsible for many headaches; nasal pressure and other sinus involvement should be looked for; the *x*-ray should be used; the teeth should be examined and autoinfection should be eliminated. There are many cases in which we should call in a neurologist and also a gynecologist;

*Technic, case reports and summary will be found in the monograph.

we might have a cystic ovary. Teamwork plays an important part here.

Dr. R. B. Sellers of Fort Worth said he wished only to speak of trifacial neuralgia, on which subject he read a paper a year ago. He said Dr. Hugh Patrick of Chicago thinks the injection of the deep ophthalmic branch would be dangerous on account of the probable injury to vision. The injection of the supraorbital and submaxillary is so simple that anyone may learn to do it by directing the needle properly backward and upward underneath the zygoma. One need not fear injuring any vital organs. He reported having injected twenty or twenty-five patients during the past three years, and in each case there was complete anesthesia, with relief of the neuralgia in from two to five minutes after injection. Considerable swelling follows the injection of the supraorbital or infraorbital, but this disappears in a few days.

Dr. John O. McReynolds of Dallas said: The splendid paper of Dr. Beck is so complete in detail, and so comprehensive in its scope, that it would be possible to discuss in the limited time alloted but a few of the phases presented. There are many features of this subject that have been of marked interest to me, and among them are affections of the eye due to removal of the Gasserian ganglion, on account of persistent pain. Spiller has employed successfully resection of the sensory root of the ganglion, instead of the complete removal of the ganglion, and he claims that in addition to the technical advantages in the operation itself there is not the danger of ocular complication, because of the fact that the trophic fibers in the sympathetic root have not been severed. I have seen, in the hands of the great masters of Gasserian surgery, such as Cushing of Boston, the most persistent ulceration of the cornea developing a few weeks after the operation. This particular type of keratitis neuro-paralytica is distinctive in its characteristics, and must be differentiated from keratitis e lagophthalmo and from kerato-malacia. I feel that this complication is so destructive to the vision that it should be fully considered in determining the surgical measures of relief in these painful affections of the trigeminus.

With reference to brain tumor with headache and ocular manifestations, I am sure we have all had some interesting experiences. I have been impressed with the variableness in the amount, character, frequency, duration and location of pain. The apparent insignificance of these symptoms may easily lead one into error, and should emphasize the value of the routine employment of the ophthalmoscope to detect possible fundus changes. This is especially important, in view of the fact that very marked visible alterations may take place in the disc and surrounding retina, even though the vision may be but slightly affected. There may be an astonishing disproportion between the visual acuity and the actual pathological changes in the fundus.

In addition to these, an involvement of the extrinsic and intrinsic ocular muscles should direct our thought at once to the possibility of tumor. It must always be remembered that the ocular changes bear no constant relation to the size or location of the growth, and that the limited area occupied by the motor-cortical zone could easily explain the complete absence of paralytic phenomena pointing to focal lesion. A close inquiry into the mental condition during the entire period of illness will often reveal some involvement of the mind, which a casual observation might easily have failed to discover.

For the immediate relief of the pain, a decompression operation is often wonderfully effective, and the vision may be notably improved or prevented from deteriorating, provided the tumor itself does not insist on continually encroaching on the cerebral space.

Dr. Beck, in closing, said: I have injected forty-nine cases of superior and inferior maxillary branches, with 38 per cent of cures, but I think the injection of the ganglion is better. I have injected 287 cases of Gasserian ganglion, with no bad effect on the cornea. It is easier to inject the ganglion than it is the branches of the nerves, therefore, I disagree with Dr. Sellers as to his method. I think if he will try a few cases he will continue to inject the ganglion. I agree with Dr. Cary in his statement that teamwork is good. The pain of brain tumor is characteristic.

THE ORIGIN OF CERTAIN NEUROSES.*

BY

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As a result of the revelations of the microscope, laboratory work and physiologic research, we hear less and less of impirical treatment of symptoms and feel that our therapy is more rational. Correct diagnosis is the foundation of the treatment of disease. It has been conclusively proven that disease is not general to the system but special to some part of it, and yet the diseased organs or parts may be so related in function or nerve supply that diagnosis of the disturbance is rendered most difficult. It is the mission of science to discover, and remove if possible, disease and the cause of it. Recent writers and teachers are classifying diseases more and more according to etiology and less according to symptoms. Thus the term "inflammation of the bowels" when the more definite "appendicitis" was proper, and "granulated lids" when the patient had some form of conjunctivitis or perhaps a true trachoma. Such are the changes in the nomenclature of disease, and even the laity are learning to comprehend this valuable advance in our teaching.

As the cause of disease is laid bare, prophylaxis and treatment are simplified and become more efficacious. Surgery has broadened to the inclusion of affections that were but a few years ago considered to belong strictly to medicine, while the other specialties are invading the fields of both medicine and surgery. They are rightly accorded a more extended domain, as their importance grows in recognition. This is particularly true of the specialty of ophthalmology, including, of course, refraction. The well directed and resourceful labors of such men as Weir Mitchell, Dyer, Harlan, Norris, Gould and a host of younger men, both in America and Europe, trained in the elinics of the old masters and influenced

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*Read before the Section on Medicine and Diseases of Children, State Medical Association of Texas, Fort Worth, May 6, 1915.

by their teaching, have forced the acknowledgment of ophthalmology as an indispensable adjunct to the practice of medicine and surgery. Its service to medical science is especially great in the diagnosis and treatment of the so-called functional diseases of the nervous system and organic affections of the brain. This specialty is also a brilliant contributor to the diagnosis of obscure organic lesions of the nervous system, circulatory apparatus and digestive organs. It reveals, by the ophthalmoscope, pathologic changes in the ocular tissues themselves, and in many obscure conditions discloses the active cause of a disease in an error of refraction or an anomaly of the ocular muscles.

Any theory of the origin of disordered function which does not embrace a consideration of the ocular apparatus is unscientific and open to criticism. There are incessant demands upon the peripheral organs of vision which are in direct connection with the central nervous system, and the many ways in which this connection is provocative of disordered function is a matter of deep significance in the causation of disease. The cause or association is, moreover, continually active because of the use of the eyes during the life of the patient.

The etiological connection between eyestrain and reflex nervous disorders, is well established and rests upon the foundation of extensive clinical experience. In no other branch of medicine is knowledge so demonstrably true. Given an optical defect with a responsive or impressionable nervous system, and reflex phenomena, the intensity and character depending upon the character of the defect and the peculiarities of the individual, will be invariably the consequence. Not every error of vision will give rise to symptoms. The same degree of optical defect that would distress a highly nervous individual, may be carried for years by a phlegmatic, dull, unresponsive person and give rise to no reflexes whatever. In order to comprehend ocular participation in certain reflexes, it becomes necessary to understand something of the physics and physiology of the visual apparatus.

The question then arises what is an emmetropic or normal eye. A very good answer to this question is, that the normal eye focuses the light and receives clear image of the object looked at without perceptible effort upon the part of the ocular muscles. If objects, such as printed letters, are seen only with great effort upon the part of the ocular muscular system, it is only a matter of time until the sustained effort produces fatigue upon the part of the delicate nervous system supplying the overworked muscles and, since these muscles are controlled by the sympathetic nervous system, they act automatically and fatiguingly in their effort to secure for the patient a clear image of the object looked at, resulting at last in a train of symptoms almost unbelievable by the uninitiated. A few of the most common symptoms are as follows: General irritability, headache, scratching and burning of the lids, dizziness after prolonged effort at reading, nausea, heaviness of the lids, sleepy feeling when reading or sewing; and in some who are possessed of a very delicate nervous system, there are even graver symptoms such as hysteria, epileptiform seizures, and other reflex nervous manifestations that are unaccounted for from any other source and finally traced to an error of vision which was a constant irritation to the sympathetic nervous system.

When we consider that it has been during the past two or three decades only that errors of refraction were taken into account as a source of great reflex irritation to the nervous system, and the observation has been made by comparatively so few, we can excuse ourselves somewhat for not placing as much stress upon the ocular origin of reflex neuroses as legitimately belong in this category. But as time goes by the laity is studying the question of health more and more. School life is menaced by the addition of subjects to be studied. Study hours are added to the limit of the physical endurance of the pupil. Now comes compulsory education; following in its wake must necessarily be universal school inspection in order to discover the physically unfit.

One of the most momentous questions that will surely have to be solved by the medical profession within a decade, is the matter of the determination of errors of refraction in the eyes of school children. Who will make these inspections? Shall the state employ oculists and aurists whose only duty it will be to visit the schools? Shall the eyes of school children be examined by opticians and jewelers? Some of these are fairly good refractionists. Will they be able to discover diseased eyes? My answer is that schools that are located in communities where there are no oculists must depend largely upon the general practicing physician, whose duty it will be, therefore, to acquaint himself with the commoner errors of vision at least, and I freely predict that within a decade there will be one or more physicians in each community who will be able to use the trial case, thereby rendering a great service to his community and incidentally adding to his financial income.

To illustrate somewhat the importance of eyestrain as the origin of certain neuroses, I wish to report a few cases, such as are met with quite frequently in practice:

Case 1.—Miss M. W., age 22 years, teacher in the public schools of Hill county. During her residence at one of the State normal schools, from which she graduated, she had become a sufferer from neuralgia, headache and backache, etc., all of which had

been erroneously accounted for as the result of indigestion, irregular periods, etc. These symptoms had been handled by the best of the local physicians, with partial relief during each attack, the symptoms returning when work was resumed in the study room. The correction of one-dioptre myopic astigmatism in each eye of the patient gave her relief.

Case 2.—Miss H., age 23, student in the University of Texas. She had suffered from periodic headaches for several years, and had of late years begun to resort to the use of codeine, aspirin and morphine for the relief of the head pains. Atropin mydriasis gave great relief, and a plus cylindrical lens, axis against the rule, has relieved her so completely that she has reported no recurrence of the pain now in over six months.

Case 3.—A married lady, age 30, has had epileptic seizures for many years. Treatment by many physicians gave slight relief. By the correction of a high degree of compound myopic astigmatism the medical treatment has been greatly aided, and, since this source of irritation has been eliminated, her physician has been able to control the seizures.

These three cases have been mentioned because they illustrate the point this paper wishes to emphasize.

As stated above, not all visual errors give rise to severe symptoms, and the great majority of patients come complaining of only a very few of the symptoms of eyestrain, so that unless one is in the habit of thinking of this source of reflex irritation the patient is allowed to grow worse and worse until every other possible cause of trouble is thought of and treated before the real source is discovered. My plea is: Learn the use of the trial case and make it a routine practice to correct the visual errors of your patients and thus eliminate the origin of certain reflex neuroses.

THE RECOGNITION OF EARLY SYMPTOMS OF NERVOUS DISEASES IN LIFE INSURANCE WORK.*

BY

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The subject is rather an important one, particularly so when we consider the increasing number and the character of these diseases, within the past few years. It will be impossible of course, and it was not intended that I take up the entire field of nervous diseases in this short paper. I will, therefore, only mention a few of the more important nervous diseases, particularly those that are most likely to be encountered and overlooked by the examiner inexperienced in their observation and treatment. The conditions mentioned may point to many other things, but this paper will treat only of the nervous element.

*Read before the Section on Medical Life Insurance, State Medical Association of Texas, Fort Worth, May 5, 1915.

In the case of persons having a blood pressure reading of 150 mm., systolic, it is proper to examine for evidence of arterial degeneration; look for arcus senilis, intermittent or irregular pulse; ascertain if there has been dizziness or an uncomfortable sensation about the head, particularly of band-like character and referred largely to forehead. Apoplexy is to be suspicioned; in persons past middle life who give these symptoms, inquire closely into the family history to see if there is a history of kidney lesion or mental or nervous disease in either the living or dead members of the family. It is also well to examine the reflexes, and for the other signs of degeneration in these cases. Of course, the urine will be carefully examined to learn of any trouble there, either chemically or microscopically, and if the examiner is not prepared to examine the urine in this thorough manner, a sample should be sent to the Home Office, with a statement of the reasons for so doing.

If low blood pressure is found, that is, if the systolic pressure ranges around 100 mm. as a maximum, one should be apprehensive of some depressing or exhaustive disease which may be only in the incipient stage. For instance, we find this type of blood pressure in the early stages of tuberculosis, pellagra, some forms of kidney lesion, neurasthenia, psychasthenia, exhaustion psychosis from overwork or undernutrition, some forms of insanity, etc. Therefore, it is necessary to examine and to inquire very closely into these cases before finally passing upon them.

The pulse is significant of other than merely the heart's condition. A persistently fast pulse should cause further investigation than simply a careful examination of the heart for organic lesion. When this condition is found, one should examine carefully the eyes to ascertain if there is an undue brightness to or prominence of the orbit, with a widely dilated pupil, indicating a beginning exophthalmic goitre. We sometimes find this symptom complex long before the enlargement at the thyroid is manifested. This condition of pulse may indicate an early attack of acute mania, meningitis or other form of cerebral irritation, and when found should be carefully studied and satisfactorily accounted for before making a recommendation on the case. On the other hand, if the pulse is consistently low, or slow in its action, we should inquire into the hereditary history along this line. We sometimes find a slow pulse as a family characteristic. If the applicant is a young person, and presents that type of pulse, it is always important to go well into the matter of heredity, and if not accounted for in that way, habits as to the use of tobacco, drugs, alcohol, etc., should be investigated, and in all cases not otherwise accounted

for, one should look out for hemicrania, or habitual headaches of a depressing character, brain tumor, epilepsy, mixodemia, etc. If there is a hemicrania, there will be a history of violent, regularly repeated attacks of "sick headache," coming on usually at night and being very severe on awakening in the morning, the pain being confined to one side of the head; often the hair on that side turns gray much earlier than on the other. Sometimes the two sides are affected alternately, and then we see a prematurely gray head of hair, symmetrically distributed. We will usually find on inquiry that one, or maybe both parents suffered in similar manner, or that the individual is of the gouty type. This disease is closely allied with epilepsy, and many persons of this type finally develop genuine epileptic seizures. Brain tumor, even early, may be determined by failing vision, diplopia, disturbed co-ordination—as asinergy or hemi-asinergy, headache, vomiting, or motor disturbances. Epilepsy may be diagnosed by the symptoms of peculiar sensations passing over the body, irritability, disturbed sleep, aura of some type, either motor, sensory or psychic. These symptoms may long antedate the actual, typical epileptic paroxysm. Mixodemia may be suspected from the sluggish manner of thought and speech, the enlarged, fatty, soft and boggy character of the muscles, and by the sallow and unhealthy appearance of the skin.

If repeated attacks of gastro-intestinal disturbances, even of a minor character, are reported, one should look carefully into the significance of the same, for this may be the beginning of a fatal pellagra, or crisis of locomotor ataxia. When a history of this kind is given, an examination of the blood pressure should be invariably made, and if low in its systolic reading, we may well be on our guard, for many cases of pellagra have this symptom in their incipiency. After taking the blood pressure, the mouth, tongue and gums should be carefully examined to learn if there is, or has been in the past, a pseudo-ptyalism; examine the skin most carefully for evidence of rythema that usually accompanies pellagra, but not always in the earlier stages; inquire about diarrhea, burning sensation in the stomach or bowels, or if there has been any irritation about the rectum or anus; ask about the condition of sleep, as many of those suffering with this disease have more or less disturbance of sleep early in the history. If we are satisfied that pellagra is negative, we should then turn our attention to tabes, and in doing this, keep in mind three cardinal symptoms, namely, loss of patella reflex, the Rhomberg sign, and the Argyll-Robertson pupil. If locomotor ataxia is present, even in the early stages, we will likely find at least two of these symptoms. It might be well to say, that the Rhomberg sign is the lack of co-ordination when standing with the feet together, and with eyes closed, and that the Argyll-Robertson pupil is one that does not respond to light, and is usually a very small pupil, much like that following a dose of morphia.

When there is the slightest evidence of tingling, hot, cold or other abnormal sensations present in the extremities of the body, the examiner should inquire into the past history very carefully in order to ascertain if syphilis has not been suspected in the past. In many cases of apoplexy, paraesthesia is the first symptom to appear. If the person is well under 40 years of age, we suspect hemorrhagic apoplexy, and apoplexy at that age is almost invariable due to syphilis. If the applicant is well over 40 years of age, and gives this history, it may or may not be due to syphilis, but it may be the forerunner of either form of apoplexy, that is, hemorrhagic, embolic or thrombotic. In these cases, take the blood pressure, high systolic reading being indicative of the hemorrhagic variety, abnormally low systolic being an indication of the embolic or thrombotic type. In neither case can the applicant be given a fifteen minute endowment with safety.

Already impairment of vision has been referred to in its relation to locomotor ataxia and brain tumor. It is well to also keep in mind the fact that alcohol produces a marked change in the vision, when used to excess, and that drug addicts present a characteristic pupil, while some forms of kidney lesion produce visual impairment. When the person examined tells that he suffers double vision, we should be very careful to find the cause before recommending him as a satisfactory risk for life insurance.

Partial deafness is also a warning to the examiner to inquire further for the cause. The history of the beginning of the impairment should be secured and the applicant's view as to its cause ascertained; this sometimes leads to a correct conclusion, but not always. Find out if one or both ears are affected, and if the affection is of a dry or a discharging character; and if the latter, whether the discharge is constant or intermittent. Also, determine something as to the quantity and character of the pus discharged, whether it is offensive or otherwise. The most important point is whether or not the deafness is progressive. We fear in this condition total deafness, abscess of the brain, or destructive caries of the bone and an incurable neuritis.

Always observe the applicant as a whole, his general attitude, gait, etc. If he carries a cane, ascertain the reason. It may be habit, pride, lameness or tabes. It is always a safe pre-

caution to try the reflexes of any man who habitually carries a cane.

In the examination of the urine, if it is well loaded with phosphates, look carefully into the nervous history, note if the reflexes and other nervous reactions are normal; inquire into the sleep habits, the present state of mind as to business, domestic or other worries; find out whether the applicant is overworking or if on a diet for any reason; in faet, we should be satisfied as to the cause of the excess phosphates before dismissing finally the applicant and making our report.

I take it that the local examiner is more or less acquainted with most of the persons he is called upon to examine, and it is fortunate for the insurance company soliciting the business, if such conclusion be correct, for a competent and well-trained examiner can and will determine much of the character of the risk by his general observation of the applicant, and if a personal knowledge be added, so much the better, and more particularly is this true in regard to the applicant's equilibrium and state of mind. Probably more fortunes have been dissipated, and more unnecessary money paid on persons suffering from paresis than from any other one cause. The courts are full of cases due to paretics changing their wills, giving notes for large sums, making impractical trades, having their lives insured for large sums, etc., after the disease was well advanced, but yet undetected. This class of persons suffer from grandiose delusions and never do things by halves, but usually by doubles, quadruples and the like.

When the applicant comes for examination, take notice of his state of mind and his character of conversation. Paretics have grandiose ideas entirely out of proportion to their real surroundings and not justified by facts. They usually are quite loquacious, rich and are in fine health, from their statement, and frequently apply for enormous sums of life insurance, out of all reason for any one in their financial condition. They are usually very sensitive and easily excited. When questioned about themselves and their false ideas, the ego becomes greatly exaggerated and their opinion is not to be questioned about any matter, whether trivial or important.

Finally, it is important to write a confidential letter to the Medical Director, if there is any misgivings on any of these or other points, giving the full benefit of the findings. I assure you that the same will always be appreciated by the chief medical officer of any company, and will be held in sacred confidence.

Pay Your Dues Now!

A PLEA FOR A MORE THOROUGH EXAMINATION OF PATIENTS SUFFERING FROM SYMPTOMS OF EARLY PULMONARY TUBERCULOSIS.*

BY

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A physician in charge of patients in a State tuberculosis sanatorium has a most excellent opportunity to study the methods employed by the average physician in his examination of patients suffering from symptoms of early pulmonary tuberculosis. And when the sanatorium with which he is connected happens to be located in one of the so-called health resorts of the Southwest, the opportunities are much greater. To such a locality the tuberculous come not only from our own state, but from states located in remote parts of the country. As a result, the field for the investigation of this subject is almost limitless.

The statistics I shall submit in this paper were gathered exclusively from sanatorium patients and are, therefore, restricted to one state but my inquiries among the tuberculous from other states gives practically the same results. As a rule, it is not difficult to secure from patients information as to what was done in the way of diagnosing their case, and the different examinations to which they were subjected. In gathering this information, I have made due allowance for errors and inaccuracies of statements, and the inclination of some to "knock" the physician under whose advice and treatment they failed to improve.

This investigation was suggested to me by a paper: "The Responsibility for the Failure to Diagnose Tuberculosis in its Early Stages," written by Dr. Lavenson of Los Angeles, California, and published in *The Journal A. M. A.*, April 6th, 1914. Dr. Lavenson takes up the history of 66 patients. Of this number, only 12 had the diagnosis made within a few weeks after consulting the physician. "In the remaining 54, the diagnosis was not made until after from three months to five years." In the 54 cases, where the diagnosis was not made in a short time, the author submits the following facts, as to what was done in the way of determining the cause of the patient's trouble.

"In 13.8 per cent of the 54 cases, neither physical examination nor sputum examination was made, nor was the temperature taken.

"In 52.7 per cent of the cases, a physical examination alone was made.

*Read before the Section on Medicine and Diseases of Children, State Medical Association of Texas, Fort Worth, May 6, 1915.

"In 12.8 per cent the temperature was taken and a physical examination was made, but the sputum was not examined.

"In 8.3 per cent the temperature alone was taken.

"In 4.1 per cent a physical examination was made and the sputum was examined, but the temperature was not taken.

"In 5.5 per cent of the cases the patient, referring the complaint to the larynx, sought a laryngologist, and in these cases only a laryngeal examination was made.

"One patient had the sputum examined, but neither was a physical examination made, nor was the temperature taken.

"In but one instance in which the diagnosis was not made, were physical and sputum examinations made and the temperature determined."

I presume no one will deny that the most important measures to be employed in the examination of a patient suffering from symptoms of early tuberculosis are, taking the pulse and temperature at least four times a day for a week or more; thorough chest examination (chest to be stripped); microscopic examination of the sputum, and a complete history, personal, family and environmental.

Accepting this statement as true, I have gone into the history of 100 cases endeavoring to find out just what was done at the beginning, in the way of making a diagnosis, and what kind of examinations were made and the methods employed. It must be borne in mind that these patients were suffering from unmistakable symptoms of early tuberculosis, for which they sought relief. And many of them consulted as many as five and six physicians before the diagnosis was made, and insisted on each occasion that they feared "lung trouble." In most cases, before the diagnosis was made, they were advised that their lungs were "as strong as a horse."

Of the 100 cases tabulated, I found that only 12 had the diagnosis made at the beginning (within ten days). In the remaining 88 cases, the diagnosis was made within from four weeks to six years.

In 15 per cent of the 88 cases, the pulse and temperature were not taken; neither was there a physical or sputum examination made.

In 50 per cent of these cases, a physical examination alone was made, and this was done through the patient's clothing.

In 10.4 per cent, the temperature was taken and a physical examination made, but the sputum was not examined.

In 9.3 per cent, the temperature alone was taken, and this was done at the time of the patient's visit to the physician's office.

In 5.2 per cent, a physical examination was made and the sputum examined, but the temperature was not taken.

In 4.8 per cent of the cases, the patients referred the complaint to the throat. In these cases, the throat only was examined.

Three patients had the sputum examined, but a physical examination was not made; neither was the temperature or pulse taken.

Of the 88 cases not diagnosed at the beginning, 6 were treated for pneumonia following la grippe; 13 were treated for colds; 17 were treated for bronchitis; 8 were treated for la grippe; 15 were treated for malaria; 2 were treated for typhoid fever; 5 were treated for catarrh; 7 were treated for chronic indigestion; 3 were treated for "liver trouble," and 12 were supposed to be "run down," and treated accordingly.

These figures speak for themselves as to the relation of the medical profession to the tuberculosis problem.

Dr. John W. Flynn of Arizona, who probably sees as many tuberculous patients as any physician in the southwest, recently published the following statement:

"Those who have made a special study of vital statistics have estimated that there are over 500,000 persons in the United States constantly affected with manifest tuberculosis, and that one-fourth of all deaths (due to preventable diseases) are caused by tuberculosis. As practically every one of these 500,000 consult a physician at least spasmodically, and quite a large proportion are under the constant care of a physician, it is evident that tuberculosis constitutes quite a large percentage of all cases treated by the physicians of every State. There is no other chronic disease of which the physicians of this country see so many.

"Since tuberculosis is so general among all classes, in every State in the Union, one would naturally expect to find the medical profession especially well qualified to diagnose and treat this disease.

"A number of years' experience in treating tuberculosis patients from all parts of this country forces me to the conclusion that there is probably no other prevalent chronic disease, the early diagnosis and proper treatment of which are so shamefully neglected by the medical profession of the United States."

In my judgment, there are three reasons why tuberculosis is not more often diagnosed in its incipiency. First, is the ignorance and carelessness on the part of the patient. He does not understand the significance of the early symptoms from which he is suffering, and carelessly lets them run along until he is really sick. The other two reasons rest with the doctor. In the first place, his clinical picture of tuberculosis was drawn twenty-five hundred years ago. The patient must be pale, wasted, worn. He must be suffering from a continuous cough, profuse and foul expectoration, night sweats and high temperature; and the disease must "run in the family." In the second place, his examinations are lacking in thoroughness. He is disposed to ignore the generally multiform and apparently innocent symptoms; none of which, as a rule, are referable to the lungs. In this, however, those who graduated as much as ten years ago, are following their teaching. It is practically within the last eight to ten years that we have

handled tuberculosis in a rational way. Prior to that time, the diagnosis of tuberculosis was considered equal to signing the patient's death warrant. And that was virtually what it meant, as the diagnosis was not made until the advancement of the disease rendered his condition incurable. There were a few physicians who understood the disease at that time, but this was the attitude of the rank and file of the profession.

In proof of this contention, I quote from three of our most popular works on Practice. "Practice of Medicine," by Tyson, published in 1896, under the head of "Symptoms," page 227, gives the following:

"In another instance an individual is subject to cold; he takes cold repeatedly, and each attack, while passing away, yields more stubbornly than the previous one, and finally one comes that persists. There is daily fever, which abates to return again, emaciation is evident, and the bright eye and burning cheeks and night sweats again attest the arrival of the dread disease."

"Practical Medicine," by Thompson, published in July, 1900, page 245, under "Symptoms:"

"1. Haemoptysis, which may precede any other evidence of local trouble and be repeated several times at intervals of months or a year or two. In other cases it is the forerunner of very rapid local changes.

"2. Acid dyspepsia and anaemia, with palpitation and lassitude.

"3. Obstinate cough, following a slight cold, a protracted 'winter cough' in several successive seasons, or an ordinary subacute catarrhal bronchitis.

"4. Progressive loss of weight and strength, although the patient may be eating and sleeping well.

"5. Chills, fever and sweating, as in malarial fever.

"6. A continued hectic type of fever, prolonged, of low grade, and not yielding easily to treatment."

"Practice of Medicine," by Osler, published in 1895, under "Symptoms," page 240:

"Pain in the chest may be early and troublesome or absent altogether. It is usually associated with pleurisy and may be sharp and stabbing in character and either constant or felt only during coughing.

"Cough is one of the earliest symptoms and is persistent in the majority of instances from beginning to end."

Page 241:

"The presence of these bacilli in the sputum is an infallible indication of the existence of tuberculosis."

Under "Diagnosis," page 250:

"The bacilli give an infallible indication of the existence of tuberculosis and may be found in the sputum before the physical signs are at all definite."

Page 257:

"So essential is the examination of the sputum in the *early diagnosis of phthisis*, that I would earnestly insist upon the more frequent employment of this method. There is no excuse for its omission, since, if the practitioner has not command of the necessary technique, there are laboratories in many parts of the country at which the examination can be made. Early detection is of vital importance, as the successful treatment depends upon the measures taken before the lungs are extensively involved."

If we are to detect tuberculosis in its incipiency, these pictures must be turned to the wall. It is just as consistent and less dangerous, to wait for the hair and eye brows to fall out, the throat to ulcerate and the body to scab before making the diagnosis in syphilis.

The National Association for the Study and Prevention of Tuberculosis, has adopted the following definition of incipient tuberculosis:

"Slight or no constitutional symptoms (including particularly gastric or intestinal disturbance or rapid loss of weight); slight or no elevation of temperature or pulse at any time during the twenty-four hours. Expectoration usually small in amount or absent. Tubercule bacilli may be present or absent. Slight infiltration, limited to the apex of one or both lungs, or a small part of one lobe. No tuberculous complications."

It is not the purpose of this paper to discuss the early diagnosis of tuberculosis, but rather the lack of it. Neither am I contending that an early diagnosis is always easy or even possible; but there is a vast opportunity for improvement of our past and present records.

I want it understood that I am not decrying the diagnostic ability of the general practitioner. As all round diagnosticians they are generally competent; but facts and figures prove that a large majority of them have the wrong idea of early tuberculosis. And this is the general practitioner's burden. He must discover these cases before they can be sent to health resorts or sanatoriums for treatment, and he must know how to handle them when they return to their homes.

Investigations in private practice and tuberculosis sanatoriums, show that less than 35 per cent of incipient cases show bacilli in the sputum. It, therefore, follows that in more than 65 per cent of our cases, we cannot rely on the microscope for an early diagnosis. Finding the germs in the sputum is proof positive of the disease, but we cannot afford to let more than 65 per cent of our patients reach the moderately advanced or advanced stage, before making a diagnosis. I do not condemn the microscope. It should be used in every case; but it should also be kept in mind, that "absenee of proof is not proof of absence," and we should not hesitate in our diagnosis simply because the sputum is negative.

What, then, shall we do that our thoroughness in examinations and diagnoses may be inereased? First, let us get out of our minds the Hippocratic picture of tuberculosis, drawn twenty-five hundred years ago. Let us bear in mind that a tuberculous patient at the beginning does not look sick, nor does he often feel

sick and that, as a rule, there are no "lung symptoms." This accomplished, we are ready to deal with our patient. We should begin by securing a complete history, personal, family and environmental. Those who know this subject best, put habits and environment above heredity. Without the preparation of the "soil" by habits and accidents, and the supplying of the seed by environment, the disease cannot develop. Then our patient should be stripped to the waist, closely inspected and carefully examined. Cause the temperature and pulse to be taken at eight, twelve, two, four and eight o'clock, for at least a week. Make a microscopic examination of the sputum and take the blood pressure. Failing in this, use the tuberculin test or consult a specialist. And when we have done this, we can no longer be censured for lack of thoroughness.

I do not wish to appear in the light of a critic. The sincere desire of my effort is to offer aid rather than criticism.

THE SUSPENSION LARYNGOSCOPE (KILLIAN); ITS AID IN THE TREATMENT OF TUBERCULOUS AND SYPHILITIC LESIONS OF THE LARYNX.*

BY

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In the consideration of this subject it will probably not be amiss to preface my remarks with a resume of the literature in which we find the tell-tale figures relative to the frequency and percentage of arrests and cures of tuberculous and syphilitic lesions of the larynx.

At the Otisville Sanatorium in New York, out of 500 tuberculous patients 128 or 25.5 per cent, showed positive laryngeal involvement. Of these 28.8 per cent were in the male, 20.7 per cent in females, and 116, or 91 per cent, had positive sputum. No laryngeal lesion was detected below the age of 14 years, the most prevalent age being between 20 and 45. Out of 500 of the adult patients, tuberculous laryngeal involvement was present in 12 per cent of the incipient cases, 25.4 per cent of the moderately advanced, and 45.3 per cent of the advanced cases.

Bullock, before the Sixth International Congress on Tuberculosis, reports 100 cases tuberculous laryngitis, 25 per cent of which were ulcerative, 75 per cent nonulcerative, and sputum positive in every case. 62 per cent of these cases showed positive sputum where no ulcerations were present, 70.6 per cent of the adults having, or having had, positive sputum, while only 25.6 per cent had had laryngeal tuberculosis.

St. Clair Thomson, reports 50 per cent of those who die from tuberculosis show laryngeal involvement at post mortem examination and 72 per cent as the frequency of its occurrence in the third stage of the disease. In 42,431 nose and throat cases, Harada and Yamoguchi, Japanese investigators, found tuberculosis of the upper air passages to be 16 per cent.

The findings of Bonney of Denver, wherein he reports 20 cases of laryngeal tuberculosis in children, the average age being 15 years, the youngest child 10 years of age, is of interest

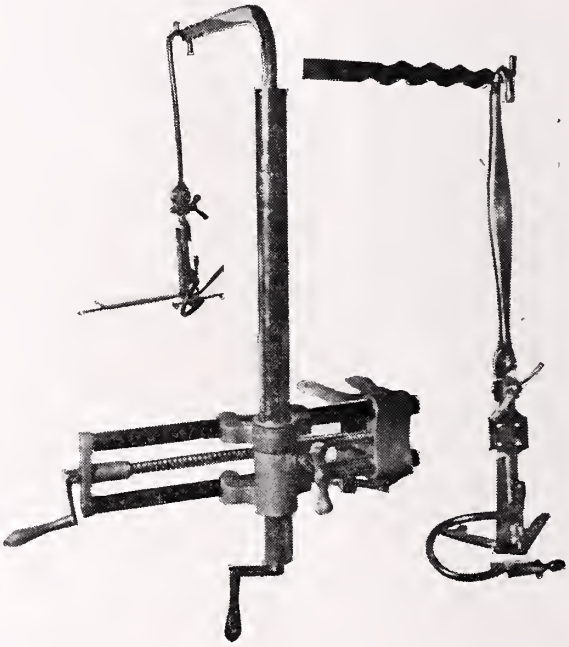

Fig. 1. Showing entire instrument as attached to the table with spatula-hook, including the epiglottis lifter, suspended on the gallows, also various cranks and thumb screws for proper adjustment.

Fig. 2. Showing relationship of spatula-hook to horizontal arm of the gallows, also tooth plate of spatula-hook with epiglottis lifter in place and running in a channel beneath the spatula. Regulating screw above, which maintains the epiglottis lifter in place. Just below the center of the spatula-hook is a milled head screw set into the instrument, by which means the opening of the tooth plate or mouth plate can be regulated, in order to afford the best exposure. Above this milled screw is a wide end thumb screw, by which means the spatula-hook can be bent in the anterior and posterior direction whenever desired, to facilitate the proper intralaryngeal examination.

when we consider the probability of laryngeal involvement in childhood. These cases were found in the examination of 68 cases of pulmonary tuberculosis occurring in children. Nobecourt and Tixier report the case of a child 3½ months, showing positive laryngeal ulceration, tuberculous in character and so demonstrated post mortem. In a thousand children examined by Collet, only 4 cases were detected.

These facts and figures are in no small degree important to the laryngologist, and dis-

*Read before the Section on Ophthalmology, Otology, Rhinology and Laryngology, State Medical Association of Texas, Fort Worth, May 6, 1915.

abuse the minds of those of us who have entertained the idea that laryngeal tuberculosis occurred only in the advance pulmonary cases, and call to our minds the advantage of early recognition of the condition. These cases, which we as laryngologists are called upon to attend, most often require of us some definite opinion as to their chances of recovery and prompt

Fig. 3. The instrument in place as seen laterally, showing the bend of the spatula-hook afforded by the long end thumb screw, at about the middle of the instrument, the position of the head slightly extended over the table and the position of the tooth plate of the instrument when in place.

steps for their relief, or arrest of the lesion; and here the reports of several of the more important investigators throw great light upon what we may expect with the proper surroundings and therapy.

St. Clair Thomson reports more than one-half of 178 cases of laryngeal tuberculosis treated in the past 3 years (to be accurate 99), either arrested or improved during their stay, and gives 20.7 per cent as a fair estimate of arrested laryngeal tuberculosis of all cases treated in a sanatorium.

Brull reports 58 per cent of the patients clinically cured and of these 31 per cent remained cured.

Schroeder shows 30 per cent cures in males and 26 per cent females, which figures seem to show that even though the male sex is more commonly affected, the disease is more fatal in the female.

Pertaining to the frequency of syphilitic lesions in the larynx, it is estimated as occurring in from 1 to 15 per cent of all cases of syphilis and most frequently between the twentieth and fiftieth years of life.

In the Suspension Laryngoscope of Killian we have at our command an apparatus that in a short space of time has forced us to form a different conception of lesions in the locality of the larynx, oftimes causing a far different and more accurate diagnosis and prognosis to be given, aside from altering materially our plans of attack. With it the lesions can be seen at close range, their character and extent determined accurately, and the treatment, whether it be surgical or medical, conveniently applied. In a number of tuberculous and syphilitic cases, in which the larynx was involved and in which the apparatus was used, the method has been highly satisfactory. It affords the operator both hands free, and close range examination with little or no discomfort to the patient. Until the advent of the suspension apparatus it has been the almost universal custom to deal with tuberculous or syphilitic lesions in this locality in a most unsatisfactory manner, in that the lesions were, in a majority of instances, left to heal of their own accord, depending solely upon treatment directed to the systemic cause; or whenever the case fell into the hands of the laryngologist and he was prompted to make local application at the site of the involvement, it has always been customary to make such applications by the indirect method, which method, in the hands of one other than an expert, is, at best,

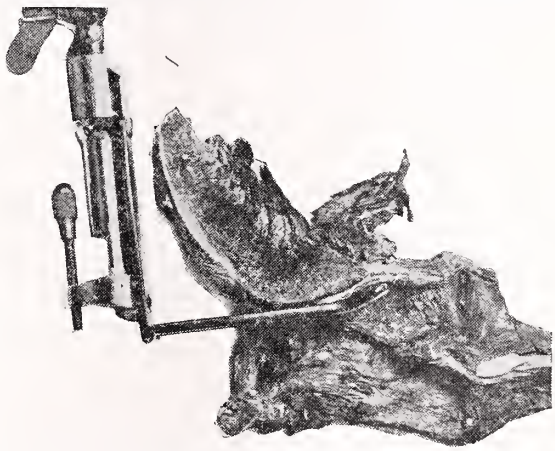

Fig. 4. Shows the inside relationship of the instrument viewed laterally as in Fig. 3, giving the correct position of the end of the spatula holding the epiglottis up together with the base of the tongue and allowing to be seen the entire intralaryngeal space. Here the true and false cords, sinus, etc., can be easily determined (for illustration purposes, when this specimen was photographed the tooth plate was removed from the instrument).

inaccurate. With the former doubtful accuracy in technic, we can readily see that the results obtained, so far as the laryngeal involvement that existed is concerned, were doubtful. The true nature of the lesions and their extent, which always governs the diagnosis and prognosis, when given by examination by means of the indirect method, oftimes assume a vastly

different aspect when compared with the pictures given by the direct method of examination.

The suspension apparatus, by which we are afforded a direct view of the interior of the larynx, is easy of introduction, after carefully

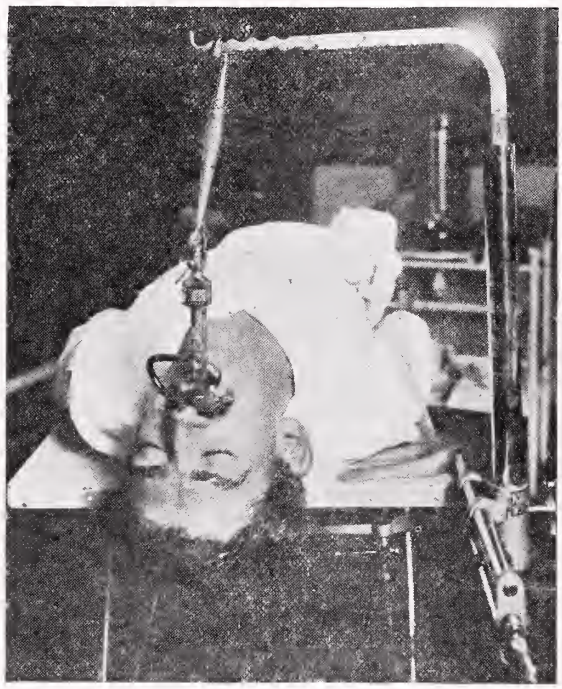

Fig. 5. View of patient with entire instrument attached to the table and spatula-hook in place. These illustrations all made under cocaine anaesthesia.

anaesthetizing the base of the tongue, the pharynx, the epiglottis and the interior of the larynx with a 10 or 20 per cent solution of cocaine, with or without a preliminary hypodermic injection of 1/8 to 1/4 grain of morphine. In my practice I have rarely found this injection necessary. With the instrument secured at one end of the table and with the patient in the recumbent position on the table, the head extending over the end and supported by an assistant, the spatula attached to the spatula-hook is introduced, care being taken that the instrument be kept in the median line of the tongue and that the epiglottis tip of the spatula engage the epiglottis, so as to hold it out of view. The spatula-hook is then suspended on the gallows, and the assistant supporting the head relinquishes his hold. By the use of cranks and set screws attached to the gallows, the necessary adjustments can be made promptly, to obtain the best view of the intralaryngeal space. The anterior and posterior commissure, the upper part of the trachea, the sinus pyriformis, the pharynx and the upper portion of the esophagus, can now be seen. By this means one is afforded an incomparable view, impossible to be obtained by any other method of laryngeal exposure. The patient suffers little or no discomfort and can be suspended, if necessary, for one hour or more. The operator has both hands free, thereby allowing him to carefully curette, cauterize, section, or remove any lesion that may be existent. With so much facility can it be done that careful suture and cauterization can be carried out at the exact site of the involvement. On account of the position of the patient during the examination and treatment by this method, the chances of interference with respiration, due to blood, secretion, or instrumentation, are reduced to a minimum, and a suction tube can be worked with ease.

In the treatment of these cases it is my opinion that the curette or cautery applied to ulceration in this locality, furnish the best results. To those who believe as I do, that surgical treatment is the one most desired when indicated in these cases, or to those who still lean to the ultra-conservative side and prefer medication only, this method of handling such cases will, I am sure, make strong appeal. It is

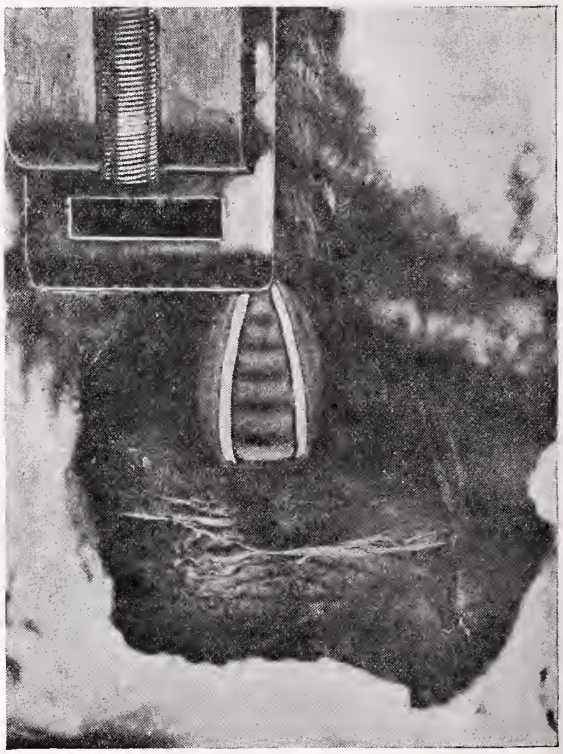

Fig. 6. Interior view of the larynx as obtained from the position in Fig. 5, showing the complete exposure of the vocal cords, anterior and posterior commissure, etc., and even several rings of the trachea. It will be noticed here that the epiglottis lifter has been removed. This illustration is the complete view obtained when looking directly through the mouth.

certainly better surgery and more rational therapy, as compared with the older method of indirect application. By this mode of procedure we have at all times perfect control of instrumentation, and the accuracy of our therapy is plainly visible.

PNEUMONIA COMPLICATED BY MENINGITIS.*

BY

A. D. PATILLO, M. D.,

ELECTRA, TEXAS.

The following case bearing on my subject, is reported:

Case.—L. A., girl, 5 years old, well nourished and previously healthy, was taken sick February 20th with a cold and some cough. Her mother treated her with home remedies until February 23d, when I was called. The patient had a temperature of 103° and a pulse of 120, respiration 30.

Physical examination revealed a consolidation of the middle portion of the left lung, with a great deal of intestinal flatus and pain around the umbilicus, this being the only pain complained of.

The case ran the typical course of lobar pneumonia for seven days, the temperature ranging from 103° to 104°, respiration and pulse in proportion. On the night of the 7th day the temperature became subnormal, and the patient went into a state of repose and stupor, as is usually seen in the crisis of pneumonia. The mother, becoming alarmed, called me at midnight. I told her that the patient had only reached the crisis, as the temperature was down and respiration and pulse in proportion, and the patient resting nicely.

The next day, the 28th of February, the patient became very restless and would sleep only a few minutes at a time, when she would cry out and toss her head and claw at her eyes for a minute, and then fall asleep for two or three minutes, only to awaken again, tossing her head and clawing at her eyes and crying out. Any attempt to give medicine or nourishment, or to change her position in bed, aggravated her restlessness. At this time the patient presented nystagmus and external strabismus of the right eye, and she was extremely hypersensitive. Her pulse was 110, respiration 24, temperature 99.6° per rectum. She was given two doses of pneumonia vaccines, mixed, without any reaction or benefit.

March 1st the condition continued the same as to temperature, 99.6° per rectum, the pulse being 110 to 116 and respiration 26 to 30. She was growing worse as regards restlessness, requiring the bromides to produce quiet. I told the family what I had been thinking for twenty-four hours, that the patient had meningitis of pneumococcic origin, although there was very little or no retraction of the head or stiffness of the neck at this time.

March 2d the condition was growing worse, the bromides no longer quieting the patient; morphine was required. She was having involuntary bowel movements and took medicine or nourishment with great difficulty, on account of a growing inability to swallow. The temperature was still 99.6° per rectum, pulse 110 to 120 and respiration 24 to 30. Marked retraction of the head with nystagmus soon followed; pupils were not affected; Kernig's sign present. Patient had been unable to speak for two days. At 11 a. m. the patient was given 20 c. c. of anti-pneumococcic serum. The patient continued restless, fretting continuously. At 6:30 p. m. 20 c. c. more of the serum was given; at 7:30 p. m. I made a lumbar puncture and withdrew one ounce and one drachm of clear fluid, without the relief symptoms usually following decompression. At 8:15 p. m. the temperature had risen to 102°, the first time it had been above normal in four days. She was apparently overwhelmed with toxemia. The temperature reached 104° at 7:30 a. m. March 3d; pulse 130 to 140, respiration 24. At 11 a. m. the patient was given 40 c. c. of the serum. At this time the patient was taking absolutely no nourishment, or anything else by the mouth. The bladder and bowels had ceased their voluntary movements and seemed to be paralyzed; the patient had to be catheterized and the bowels did not move for 48 hours, in spite of the fact that a large dose of calomel was given, and followed by one ounce of castor oil and enemata, not responding until twelve hours after the administration of 1½ minims of croton oil. The temperature at this time, March 4th, was running somewhat lower, 102° to 103°, pulse 120 to 124, respiration 24 to 30.

At 1:30 p. m., March 4th, 20 c. c. more of the serum was given, making 100 c. c. in all. The patient had now not taken anything by the mouth for 48 hours, not even water. At 7 p. m. lumbar puncture was done, but only ten drops of fluid withdrawn, there being no pressure at all. The temperature was still high, 104°.

March 5th the patient regained consciousness and took nourishment. The bowels and bladder acted nicely. The temperature was 100.6°. On March 6th the patient voided the urine naturally and the bowels moved voluntarily. The patient could articulate for the first time in five days, and a paralysis of the right arm, which I have failed to mention, was practically cleared up. The temperature was 99.8° per rectum, pulse 100, respiration 24; practically normal all around, as will be seen. The patient made a good recovery.

I have offered nothing new in the treatment of pneumonia, but the case reported leads up to the complication which is the burden of my paper. I should say, that I made a culture of the spinal fluid and found a gram positive diplococcus, which in spinal fluid is sufficient for diagnosis of pneumococcic meningitis, especially when complicating pneumonia. I believe meningitis of pneumococcic origin should receive lumbar puncture and anti-pneumococcic serum, just as much so as cerebro-spinal meningitis should receive lumbar puncture and anti-meningitic serum.

In looking up the literature on the subject, I find that the disease is considered "absolutely fatal and that there is no scientific evidence of any possibility of recovery[1]."

These cases are rare and extremely fatal, and where I have folded my hands in the past and said, "It's the Lord's will to take him," I now believe that many can be saved by treatment with lumbar puncture and a serum for the exciting organism, be it a pneumococcic or streptococcic infection.

1. Forscheimer's Therapeutics of Internal Diseases.

*Read before the Section on Medicine and Diseases of Children, State Medical Association of Texas, Fort Worth, May 6, 1915.

TOXICITY OF CAMPHOR.—A case is reported in which an 18-months old child was given, after a meal, a teaspoonful of camphorated oil (linimentum camphorae) by mistake. While this dose must have contained about 15 grains of camphor, no untoward symptoms were observed.—*Jour. A. M. A.*

ECTOPIC GESTATION WITH REPORT OF CASES.*

BY

J. E. GILCREEST, M. D.,

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The object of this paper is simply to elicit discussion of the diagnosis and treatment of ectopic pregnancy.

Finley says that an early diagnosis is seldom positively made. In many cases a diagnosis before rupture is impossible and when the rupture is slight, it is often mistaken for appendicitis or some inflammatory condition. I have had a number of cases referred to me in which a diagnosis of appendicitis had been made. This is more frequently done when the pregnancy is in the right tube, as the location of the pain is so near the appendix.

The history of a case is of the greatest importance, and should be taken with the utmost care. When a woman of child-bearing age, whose menstrual periods have been regular, goes from a few days to a week, or more, over her time, and then has an irregular bloody discharge, which may be free at times but soon amounts to only a show—then, if she has pain in her pelvis, either slight or severe, tubal gestation should be thought of and confirmed or excluded, if possible, by a most thorough investigation. The examination should be made with great care, as severe internal hemorrhage may be caused by pressure on a distended tube that is ready to rupture.

Case 1.—Mrs. H., age 32. Family history good. Personal history: Menses came at 14, were too free but not painful. She married at 18, and has had 4 children. One child died 20 minutes after birth. Last confinement was 10 years ago. Her menses came, as usual, in January, missed February, then came a little three times in March. She thought that perhaps she might be pregnant, but was doubtful, as 10 years had elapsed without conceiving. During the last of March she suffered keen pains, but grew better and was able to be up. On April 9th, she experienced intense pain in her right side near the appendix, and had temperature of 100°, and a slow, full pulse. A diagnosis of appendicitis was made. In the morning of April 13th, at 10 o'clock, there was excruciating pain and collapse. She was brought to the sanitarium at 5 o'clock that afternoon, in a severe collapse, with temperature of 97°, pulse 150, and in a semiconscious condition. A diagnosis of ruptured extopic gestation was made, and an operation performed 1 hour later. Stimulants of camphor oil, adrenalin chlorid, and normal salt solution, were given from the time the patient arrived until she was put on the operating table, but she rallied little. We employed nitrous oxid gas as our anesthetic, with novocaine locally. When the abdomen was opened, we found the intestines floating in blood. The right tube, which was still bleeding, was clamped immediately. The abdomen was cleansed of blood. The foetus and placenta, with the ovary and tube, were removed, as shown in the accompanying specimens. The patient remained partially unconscious for about 6 hours before regaining strength. She then improved continually and made an uneventful recovery.

Case 2.—Mrs. M., age 17, was a German girl and was reared in the country; she was married November 25, 1914. About the middle of November, her menses came as expected, but were late in December, commencing about Christmas time with an irregular flow. She consulted her family physician and he thought that possibly she had had an early miscarriage. This irregular flow continued without much pain until after the 10th of January, when she was given a curettment. The flow stopped for about three days, and then commenced again. About the 20th of January, she suffered intensely, having an attack of rather severe pain, and for the relief of which a large hypodermic of morphine was necessary. The doctor discovered that his patient had some swelling in the pelvis in the right side, and thought probably it was a pelvic inflammation and threatening abscess. Her pulse was running about 120, and temperature from 100° to 101°, when she was brought to the sanitarium, January 25th, 1915. She was very weak, but showed no evidence of hemorrhage at that time, and suffered only slightly. We decided upon a brief period of observation to note her condition, before further activity on our part. Her condition was worse on the following morning, pulse had increased and her strength had ebbed. I summoned her family physician, Dr. Maxwell of Myra, and advised that we operate at once, which we did. When the abdomen was opened, we discovered the pelvic organs to be decidedly inflamed. The left tube was considerably swollen. The right tube was larger than my thumb, with the rupture near the distal end, and the tube still contained placental tissue. This specimen was unfortunately misplaced, so I cannot exhibit it. We removed the right ovary and tube. The ovary was cystic. We cleansed the abdomen of all blood and foreign matter, as there was a tendency to ooze, and her blood evidenced some infection. We used drainage in this case for a few days. The patient's recovery was uninterrupted, and she has been exceptionally well since that time.

The points of interest in these two cases are, that case No. 1, was transported 5 miles in a wagon, and 25 miles on the train, after she had had this hemorrhage and shock, and then withstood the operation, and lived. Case No. 2, is of interest as it is so unusual for ectopic gestation to occur in one so young. Her symptoms were never very positive, and any physician who is not familiar with those conditions and on the alert, would possibly have made a wrong diagnosis.

*Read before the Section on Gynecology and Obstetrics, State Medical Association of Texas, Fort Worth, May 6, 1915.

IODOTONE.—Eimer and Amend, who market Iodotone, state that it is a glycerine solution of hydrogen iodide, containing 1 gr. iodin to each fluidram. While Iodotone must act like ordinary iodides and while nearly one ounce of glycerine must be swallowed to obtain the equivalent of 10 gr. potassium iodide, the unwarranted claims are made that Iodotone is superior to iodides. Because of misleading claims and because the name Iodotone is likely to suggest its use as a general tonic, Iodotone was refused recognition by the Council on Pharmacy and Chemistry.—*Jour. A. M. A.*

STRICTURE OF THE RECTUM.*

BY

CHARLES S. VENABLE, M. D.,

SAN ANTONIO, TEXAS.

It is my purpose to restrict the discussion to inflammatory strictures of the annular or obstructive type of the second and third portion of the rectum, that being the region of common involvement, and so to exclude high strictures and malignaney which necessitate a very different and more radical consideration.

In the etiology of these simple strictures we have been too prone to presume them to be syphilitic. I admit that a syphilitic is possibly predisposed and that a specific ulcer in the rectum may be a direct cause, but this latter is rare and in the former a local nidus of irritation is the primary factor. Gonorrhoea of the rectum, especially in women, ulcers, fistulae and the aftermath of operation, or peri-rectal and other pelvic inflammation are the primary factors, the extension of inflammation inducing infiltration and adhesions which undergo fibrous changes, being the active cause. This is borne out by the pathology of these strictures which present a dense fibrous ring involving all the coats of the bowel on a wide indurated base that is intimately adherent to peri-rectal tissues. The usual site is one or two inches within the anus. To the examining finger the base seems fixed, the margins are hard and resisting. Through the protoscope the constriction is plainly visible, presenting a reddened infiltrated mucosa, possibly ulcerations or fistulous openings, though if these be beyond the ring they will not be seen except with an instrument that will pass beyond. The size of the lumen can be measured by a graduated bougie and if found to be as small as 25 F., constitutes at once an obstructive lesion that will permit only fluid and gas to pass.

It is necessary to observe caution at the examination, as this fibrous ring is often brittle and tears easily, serious consequences such as peritonitis following. So it becomes at once apparent that forceful dilation should never be practiced; however, the earlier recommendations are for gradual dilatation for relief, which is also the advice of the latest texts, with the addition of a posterior division in extreme cases. The results of these methods have been anything but encouraging and it seems to me should be recognized as only palliative at best. Dilatation gives relief only so long as it is practiced, and only in those cases in which the stricture is sufficiently large to admit a finger. Otherwise, division of the ring is essential, which must be followed by active and persistent dilation to prevent immediate reformation of the fibrous bands more dense than before. One of the difficulties attending this treatment is the pain and discomfort afforded the patient, but it is obvious that it must be persisted in to avoid flat failure. This would be worth while if in the end strictures were permanently relieved, but this is not so. These cases almost without exception, have a recurrence as soon as dilatation is discontinued and often from the irritation and even contusion the condition is worse than before.

Therefore, it seems to me that we are warranted in undertaking more radical steps in our attack. I have recently adopted a method that offers a chance of permanent relief, and it has, so far been very satisfactory. It is a resection of the rectum past and including the stricture and fistulae, if there be any, and bringing healthy rectum to the outlet. This procedure is not new but I am of the opinion that it is not only not selected as an operation of choice but is rather shunned. I think this is so because of the unsatisfactory results generally obtained, which results I attribute to faulty technique and incompleteness of the operation rather than to the surgical soundness of the procedure. One of the very important details is a careful preliminary treatment of the bowel. The intestinal canal is first emptied by catharsis, then while the patient is allowed as liberal a diet as possible, of articles of food leaving little residue, the rectum is cleansed two or three times daily for several days, by flushing through a tube passed beyond the stricture. This improves the condition of the mucosa and materially lessens the induration about the field of operation.

When the patient is brought to operation, under ether anesthesia, a complete divulsion of the sphincters, without contusion, is the first step that requires much care and time. This completed, a circular incision at the skin margin is made, and grasping the rectum on the four sides with hemorrhoidal clamps which may be used as tractors, and with one finger in the lumen as a guide, the gut wall is dissected free over and beyond the sphincters, until the prostatic layer of the rectovesicle fascia is reached in front, or of the recto-vaginal in the female and the parietal layer of the pelvic fascia behind. Haemostasis is now attended to, the hemorrhoidal branches of the perineal arteries being the most important. Now with blunt scissors, rather by spreading the blades than cutting, the dissection is carried in this peri-rectal plane until the base of the stricture is reached. Here it is well to divide posteriorly the constricting band in the rectum to permit the passage of the guiding finger beyond to guard against injuries to the rectum. The base

*Read before the Section on Gynecology and Obstetrics, State Medical Association of Texas, Fort Worth, May 6, 1915.

of the stricture is now attacked and it is most essential to carry this dissection around it and not through it. In doing this a part of the levator ani may be sacrificed, but in front, if in the male and beyond the prostate, one must guard against injury to the seminal vesicles. Quite large branches of the internal pudic may be encountered here, and they must be ligated. Once beyond the base the same peri-rectal plane is sought and the dissection continued by the same spreading motion of the blunt scissors, cutting as little as possible, until the rectal wall beyond the stricture can be brought to the skin margin *without tension.* This done and haemostasis attended to, lest haemotoma bring defeat, the rectum is amputated beyond the stricture and the free edge united to the skin margin by interrupted sutures. I have found it well to free the skin also, as this lessens the tension of retraction at the suture line. This is a very important detail; I believe one of the reasons of recurrence is insufficient freedom at the sutures line, with consequent sloughing and retraction of the rectum which creates a new stricture in the process of healing by granulation, in what is then an intensely irritated and inflamed field.

In those cases complicated by fistulae, the procedure is the same, but the resection must be sufficient to permit amputation of the rectum beyond the opening into the bowel. The remains of blind fistulous tracts will close spontaneously, or if into the vagina the walls of the latter can be freshened and primary union expected. The operation completed, small protective drains are placed in the peri-rectal spaces, and a large stiff rubber tube nearly as large as a garden hose is placed in the rectum to the sigmoid. This is kept *in situ* for from seven to ten days, when the bowel is moved for the first time through this tube. The protective drains must be dealt with according to whether there is or is not peri-rectal infection, and if the suture line is shielded by silver foil, this will make no great difference in the result, only making the after care more tedious. In four of my cases infection supervened, and while draining I inserted a long conical metal rectal dilator, which was worn in the rectum and only removed for stool or flatus. This the patients could do themselves without discomfort. This prevented constricting bands of scar tissue forming in the infected peri-rectal area. I have treated a total of eleven cases in this manner, in five years, and will draw the conclusion for your consideration from a summary of these cases.

The ages ranged from 26 to 64, there being three in the thirties, five in the forties, one in the fifties and one in each extreme. There were 4 males and 7 females. Fistulae were present in 6 cases, two males and four females, one of which in the latter was simple and three recto-vaginal. Four cases were syphilitic, 2 males and 2 females, although to none of these could I attribute syphilis as the primary cause or even entering the case as a positive factor.

The time elapsed since operation extends over 5 years in two, 4 years in three, 3 years in two, 2 years in three and 1 year in one. In the end results 2 had fibrous constrictions within the anal ring, due to retraction of the rectum. One of these was relieved by Crede's multiple incision and dilation but still has a partial stricture. The other was not sufficiently embarrassed to submit to treatment, but is not considered a cure. Three cases presented an increasing tensity of the anal ring, which is due to scar tissue in the integrity of the sphincters. All three of these cases use rectal dilators on themselves, and two of them I divulsed, but without relief.

The remaining 6 cases have been permanently relieved, having had no recurrence of stricture and no sphincter irritation. In none of the eleven has there been a recurrence of the stricture at the original site; all of the 6 cases complicated by fistulae were relieved of that condition, but two of them are among the cases scored as only partly relieved. I do not feel that these five cases of indifferent results are a fault of the procedure but rather in the technique. The six good results, on the other hand, seem to offer stimulus to perfect the technique, so that a larger percentage of good results ean be attained.

INJURIES OF THE BACK FROM A MEDICO-LEGAL STANDPOINT.*

BY

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When a workman sustains an accidental injury to the back, and an attempt is made to hold another responsible for it, the case has two main aspects, the one legal, the other medical. Under workmen's compensation acts, the law has been so fully developed that, except in rare cases, the legal position of the injured man is clear, provided the necessary facts can be proven. However, in considering the medical aspects of "Injury to the Back" all precision vanishes. Instead of the developed law, we have uncertain facts and opinions of a kind most difficult to test, and it is impossible to foretell what deductions will be drawn from these facts and from the opinions expressed by the witnesses. There is no law, no authoritative medical law, to which we may refer to see the result of the medical facts proven. In injuries of the back all that can be obtained is the evidence of the doctors on each side of the case. This evidence, which is of two classes, is frequently conflicting. The first deals with the injurious effects sustained by the back. This is really evidence of fact. The second deals with the untoward consequences which may or may not arise from an

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injury of the back. This is, strictly speaking, not evidence, but skilled prophecy. From such controversial material the extent of the plaintiff's injury, and of the consequent liability of the defendant, must be obtained.

When an injury of the back has occurred, there are certain points which must be dealt with, many of which are not touched upon even in the leading medical and surgical texts. In brief, they are as follows:

(1) What are the immediate consequences of an accident to the back?

(2) What chance is there of some severe neurological or trophic disturbance arising as a remote consequence of an injured back?

(3) Within what time will the injured person be absolutely physically cured and able to work

(4) Is there any likelihood of the condition becoming hopelessly incurable?

Pain in the back as a result of injury, is the most frequent affection for which compensation is demanded from the casualty company. Before considering any other phase of this most important problem—pain in the back—there are two points which must be definitely determined: the first is, whether the pain really exists, or is psychic; the second, whether it is due to disease or to the alleged injury. Any dishonest laborer, with *money* fixed in his mind, can very easily recall some undue exertion, strain or sudden slip, which will explain his pain. Even an honest toiler, when affected with a sudden sharp pain in the back, can recall some hard manual labor, which he readily assumes to be the cause of pain in the back.

Lumbago is a condition of most frequent occurrence. It is characterized by a sharp and sudden onset, and often manifests itself when an attempt is made to rise from a stooping position. The laborer, however, seldom suffers from the pain of lumbago, but is a frequent victim of pain in the back through injury. Another difficulty encountered in these cases is, that in a large, fleshy workman it is not the easiest thing in the world to make a satisfactory physical examination—and frequently all the examining physician has to guide him is the patient's statement, usually exaggerated, often false, that he is suffering pain at some definite point. The usual clinical picture of lumbago is that it is bilateral, widespread, relieved by pressure, and, as a rule, felt only when making certain movements. As a condition it yields readily to treatment, rest in bed, salicylates and massage. Behind lumbago there is, as a general thing, a history of the patient being employed in some damp, cold spot, or having become suddenly chilled after great exertion.

An intelligent discussion of injuries of the back necessitates that one keep constantly in mind such conditions as renal affections, spinal diseases, internal growth, and, in females, diseases of the organs of generation.

It is frequently contended that as a result of injury there has been displacement of a kidney. It is practically impossible for even the most violent exertion to displace a normally attached kidney. A traumatically displaced kidney is always accompanied by symptoms of the severest gravity. There is severe pain over the kidney area, hemorrhage into the bladder and severe shock. A normal kidney, in the vast majority of cases, cannot be felt by palpation, but in displacement it can be felt between the palpating hands during the act of expiration following a deep inspiration. Displaced or loosely attached kidney is a frequent condition, and in thousands of individuals it produces no symptoms whatever, and, in many cases, is only discovered in the course of an examination after an accident. Kidney litigation is about as follows: A displaced kidney is discovered, pain is admitted, there may be slight evidences of bruising, and a hasty and serious diagnosis is immediately made of traumatic displacement of the kidney. This case should not be considered one of fraud on the part of the patient. The medical man has committed a diagnostic and prognostic blunder.

In connection with back accidents, the most frequent injury is a tearing of the lumbo-sacral muscle fibers, or a sprain of one of the vertebral joints, or of the sacro-lumbar joint. The most frequent history in these cases is some unusual strain or a misstep while carrying a great weight. The patient complains that "something snapped or gave way in my back." Acute pain at a definite spot completes the clinical picture. The condition is in the majority of cases unilateral, and severe pain is apt to persist for several weeks.

A fall or a blow on the back, bringing about the physical condition just described, runs a well-prescribed course, and the symptoms and their duration correspond to like injuries in other parts of the body. When dealing with an injury of the head, shoulder or knee, and the patient complains of pain in the back, the whole physical picture becomes changed—for the pain is now but the expression of a physical state. By that I mean that the pain has no organic basis in the spine, but is merely referred to it. These cases demand psycho-therapeutic measures. Unfortunately, however, psycho-therapeusis presents a most difficult problem, for, in most of these cases, the physician is denied the active co-operation of the patient.

In severe injuries of the back, diagnosis is often facilitated by a skiagraph,* which may show the presence of periosteal elevations where muscular attachments have been torn from the bone. However, our real problem only begins when we come to determine whether the pain complained of actually exists, or is assumed. At the outset one should have the injured person touch with the finger the exact spot where pain is felt. This spot should be marked with a blue pencil. The injured man should be allowed to rest for an interval, and then again requested to point out the painful spot. Under no circumstances should he be allowed to see where he is pointing. If the pain is feigned, he is more than apt to point out a spot several inches away from the first one. In these cases the lightest touch brings forth a shout of pain, and the attention of the injured one must be distracted in various ways. Put the question, whether the other side is painful,

*Author's Note.—It should be an invariable rule to have all bone injuries photographed by x-rays before going into court. It is well to remember that, whether the defendant takes this precautionary measure or not, the chances are that the plaintiff will. In view of the fact that radiographs are useless and are liable to mislead one unless very carefully taken, it is well to employ a competent radiographer. It should be borne in mind that it is one thing to look at a radiogram, and quite another thing to be able to interpret it correctly. It is most amusing to see skiagrams solemnly handed round to a jury, who examine them with much anxiety and apparent intelligence. Radiograms should always be interpreted to the judge and jury by those accustomed to dealing with them. I never interpret pictures of my own cases, preferring to leave the matter to an expert.

Radiograms cannot, of course, demonstrate muscular injuries, but when the attachment of a muscle to the bone has been torn away, and it carries some portions of periosteum or bone, the outline of the bone is irregular and wavy.

No radiogram should be produced in court unless it is the work of an expert radiologist; yet thousands of dollars are often obtained from defendants by means of untrustworthy radiograms. Radiograms are as easily faked as are the trick representations of a cinematograph show. All of these matters must be given serious consideration before plunging headlong into litigation.

at the same time applying firm pressure to it. Now that the patient's mind is concentrated on the sound side, it may be possible to put considerable pressure on the affected side without causing any expression of pain. Another clever ruse is, after a cursory examination of the back, to apparently forget all about it, and then begin examining the chest walls with a stethoscope. Begin the stethoscopic examination in front, and reach the back gradually. On auscultating the back, it is more than probable that the patient will be able to withstand a great deal of pressure with the stethoscope on a spot originally complained of as most painful.

If pain is complained of in the upper part of the back, the truth of the matter can generally be arrived at by bending the head forward, while the trunk is maintained in a rigid position. By this procedure the vertebral muscles are put on a stretch, and if this can be done without pain the chances are that the pain alleged is psychic.

As far as movements of the spine are concerned, a claimant will probably declare that the slightest movements give rise to excruciating agony. In these cases the patient should be asked to bend forward as far as he can without causing pain, and the amount of flexion should be carefully noted. Engage the patient in animated conversation, and while his attention is well distracted ask him several times to bend his spine, and the chances are that the degrees of flexion will vary considerably. From the very moment the medical examiner comes in contact with the patient he should never relax his vigilance. A good rule is to strip the patient naked and observe him as he undresses. Watch well the unlacing or lacing of the shoes and the withdrawal of the undershirt. Dropping some loose change or a bunch of keys on the floor as soon as the patient enters your presence, in the hope of his stooping to pick them up, is a ruse that often succeeds.

Frequently, as the result of trauma in the region of the sacrum or coccyx, organic nerve disease is alleged. In this connection, it must be borne in mind that the cord ends at the lower border of the second lumbar vertebra—sometimes the first—and it is a matter of physical impossibility to have any pyramidal trouble as a direct result of a sacral injury. About the only manner in which anything serious could be brought about would be an injury to the cauda equina, followed by an inflammatory process extending upward to the cord. But a condition of this kind must necessarily be preceded by a meningitis and neuritis, together with atrophy of the muscles. The presence or absence of trophic changes is of great importance in these cases.

It is possible — barely possible — that serious organic disease may follow a jar to the spinal cord; but forever keep syphilis in mind. Locomotor ataxia, disseminated sclerosis, paralysis agitans, or progressive muscular atrophy may follow a jar to the spinal cord, but, I repeat, *forever keep in mind syphilis.*

Railway spine, while not the dreadful bogey of former days, is still a source of worriment to the physician. In the days of Erichsen, what was regarded as "railway spine," or "concussion of the spine," and supposed to be based on definite organic changes in the spinal cord, is now correctly diagnosed as "hysterical spine." In "hysterical spine" there is alleged hypersensitiveness over certain parts of the back—as a rule, the sacro-lumbar area. This condition, a purely psychic one, often proves intractable to treatment; some of my confreres claim it is absolutely incurable. This view is wrong, as an adverse court decision has cured several of my most obstinate cases. Other cases require copious applications of "greenback salve," after which rapid recovery ensues. A condition curable with money is not a disease—it is a swindle. In former days railway corporations were defrauded out of large amounts of money by victims of "railway spine." Through introspection and gross exaggeration many fakers have been gloriously rewarded with large damages. The present-day methods of psycho-therapeusis would have changed the picture.

In the general run of cases of alleged "railway spine," there is no evidence that the spinal cord has been shaken up or jarred. As a matter of fact, the analogy between concussion of the brain and so-called concussion of the spinal cord is a bit far-fetched. The brain fully occupies the brain box, and any jar or blow upon the skull directly jars the brain. Thus, at autopsy, the brain is frequently in a lacerated condition. But how entirely different are the anatomical relations of the spinal cord! The cord does not occupy the canal in its entirety. The spinal cord is surrounded by a large quantity of cerebro-spinal fluid, and is held in suspension in the fluid by lateral ligaments. Thus we see how safe the cord is from external injury, and it is indeed a moot question whether concussion of the spinal cord can be brought about.

Pain—real pain—is Nature's warning when disease exists in the spine. Stiffness, rigidity and pain are the three cardinal diagnostic signs of spinal trouble. The absence of these three symptoms means the absence of actual disease.

In dealing with actual injuries to the spine there is (1) damage to the spinal column, which, while serious, is of relative unimportance as compared with (2) damage to the nervous structures, which may be followed by death, paralysis, varying loss of sensation and neurasthenia. When the spinal cord is damaged at or above the fourth cervical vertebra death is, as a rule, an immediate occurrence; injuries below this point may cause death in a few hours, days, weeks, or even months from some complicatory process such as pneumonia or nephritis. As a general rule, the farther down the spine the site of the injury, the longer will death be deferred. Paralysis may be either complete or partial, this, of course, varying in extent with the region of the spine involved. Loss of sensation and loss of control over the excreta are also varying conditions. Diseases of the bladder and kidneys may arise as a result of loss of control. Bed sores, later becoming infected, are also not unusual conditions. A neurotic condition known as "traumatic neurasthenia," as a consequence of spinal injuries, will not be discussed in this paper.

At this juncture it will be well to consider a few of the essential points involved in an examination of the spinal column. As the back is bent, each separate vertebra encroaches a little upon its fellow, and each spinous process is separated slightly from those of the neighboring vertebrae. First have the patient assume a stooping position; now press the fingers of the two hands between the spinous processes of the cervical and upper dorsal regions. While the fingers are in this position ask the patient to slowly raise himself to the erect position. During flexion the spinal processes separate, but approach each other as the spine is straightened. If this stooping and raising be accomplished without pain, it means absence of disease at the particular spot examined. The whole length of the spine can be examined in this manner by merely having the patient stoop four or five times.

In the great majority of cases, alleged pain in the back is purely psychical, not physical. I cannot repeat this too often. The suggestion of a tender spot, or of pain, obsesses the patient. In dealing

with malingerers who keep their backs bent in such a way that the face is always looking to the ground, it is wise to strip them and lay them flat on the floor. Once the patient is on the floor, place a pillow under the back, thus arching the back in a position exactly opposite to that assumed when standing. If the patient goes through this performance without complaint you may be sure the case is one of malingering. If a patient complains of pain and tenderness in a particular spot, tell him that very firm pressure with the palm of the hand over the alleged painful area will not produce pain. After the patient has received these instructions, apply very firm pressure as directed above. If no complaint is made by the patient, the diagnosis is clear—*malingering.*

If if it possible, coax the patient to stand on his tip-toes, and then have him come with all force down on his heels. The examiner must not put any questions to the patient as to whether pain has been produced along the spine. If the patient says nothing of pain, one is safe in declaring there is no very tender area.

Quite a clever idea in examining the spine, is to fix the pelvis with both hands, and have the patient to rotate the body first to the right, then to the left. This trick may be successfully carried out by asking the patient a question, such as: "Say, did you know that you had a mole on each shoulder blade?"

The use of the electric battery in unmasking the faker is beyond estimate. If a patient under examination complains of marked tenderness at a particular spot, it is extremely difficult to deny or affirm such a purely subjective symptom. The weakest current of electricity increases pain or sensitiveness if real. The fraudulent patient frequently complains that the alleged hypersensitive spot is made more painful by an electrical current. The truthfulness or falsity of this statement may be demonstrated as follows: Set in motion a noisy faradic battery, and apply the indifferent electrode some distance from the alleged painful point; the other handle, in which is the break key, is by degrees, from some distance, appoached to the painful spot. Now depress the break key and the current is entirely abolished, although the battery is still making a racket. At this juncture put the question very plainly to the patient whether the current is felt to a greater or less degree as the handle approaches the painful area. On account of hearing the battery still in action, and assuming, threfore, that he is receiving the current, the invariable answer of the malingerer is sure to be "Yes."

After a spinal injury it is not unusual to feign weakness in the legs or arms and complain of altered sensation and persistent pain. Weakness of the legs might be shammed by the malingerer, but he is unable to change the character of the reflexes —thus fraud is detected. The malingerer invariably exaggerates, and it is nothing unusual for him to make no attempt to walk; in bed he will even refuse to move his legs. His muscles may atrophy from lack of exercise, but the normal electrical reactions will not be disturbed.

A symptom often complained of in back cases is frequency of urination—this of itself is of little consequence. Difficulty, incontinence, or retention, occur often in association with definite diseases of the nervous system, when the unmistakable results of injuries can easily be recognized. Despite this, day in and day out, vigorous, healthy men complain of either frequency or incontinence of urine, alleging same to be due to spinal injuries. As to blood in the urine, this may have its origin from many causes other than accidents. Paroxysmal hemoglobinuria has been used as a means of fraud.

DEPARTMENT OF EXTENSION

[The articles below on apoplexy and neurasthenia are written in non-technical language, and like other articles which have appeared in this department, are adapted for lay distribution under proper precautions.

Unquestionably the neurasthenic can be encouraged by cheerful literature, but one might think apoplexy not a fruitful topic for discussion. Nevertheless there is a modicum of knowledge which should be in the possession of every family subject to apoplexy. The laity should know that even apoplexy is not unrelated to preventable diseases, such as syphilis; that a tendency to apoplexy is inherited, and that the blood pressure constitutes a fairly valuable warning of its imminence.

Not long ago one of our readers encountered a case in the person of a young matron whose four grandparents had all died of apoplexy. It would have been worth while for her to know the contents of the article below. It is likewise fitting that all offspring from an apoplectic parent should have this knowledge.

In so far as the physician imparts the knowledge which he possesses, and which would probably help his patient, he fulfills his true mission and leaves less opportunity for the charlatan to prey upon the innocent.

We have a few reprints of these articles for those interested.]

NATURE AND PREVENTION OF APOPLEXY.

When a blood vessel bursts in a person's brain, it gives rise to a condition which is called cerebral hemorrhage, or apoplexy. As a rule, a paralysis of some part of the body follows a cerebral hemorrhage, and hence apoplexy is often referred to as a "stroke of paralysis."

The results of a cerebral hemorrhage depend not on the loss of blood but on the amount of damage to the delicate brain substance or nerve fibres. The blood flows out of the vessel with considerable force, and makes a place for itself by stretching or tearing the soft brain substance, which offers but slight resistance. Cases are said to have occurred in which the escape of a single drop of blood has damaged a vital center and produced death. Under certain circumstances, a large clot may be formed without a fatal outcome. This is because the clot has not torn or pressed on a vital center. In any given case the friends and relatives of the patient should hope for the best and should carefully follow the directions of the physician in attendance, who will be best able to forecast the seriousness of the attack.

The paralysis caused by a blood clot in or on the brain, sometimes affects one entire side of the body, causing the peculiar gait so often seen, in which the person drags the toes of one foot over the ground and holds the arm of the same side drawn up close to the body. In some instances others parts of the body are affected. By observing the distribution of the paralysis, that is, the parts affected, the physician can form a fairly accurate idea of the location of the clot. Almost every patient that survives an apoplectic stroke experiences a certain amount of improvement, especially during the first six months after the attack. Here again the patient should hope for the best and follow the instructions of his physician.

Persons are placed in danger of apoplexy by anything that weakens the walls of the blood vessels or increases the blood pressure. Probably the commonest single cause of high blood pressure is a certain inherited type of constitution, formerly called

the "uric acid" type. Many persons of the upper classes, especially those whose ancestors have been intellectual workers, show this type of constitution. Such persons have hardened arteries with brittle walls. Contagious blood poison, malaria, and certain other infectious diseases, tend to harden the arteries and hence favor apoplexy. Drinking to excess, or excessively hard work and severe physical strain, may cause apoplexy in a person so predisposed. Bright's disease often causes apoplexy.

To avoid the apoplexy, each person over forty years of age should have his urine examined and his blood pressure tested, once a year. If dangerous tendencies are noted, he should employ a physician to map out for him an appropriate regime, which should be constantly followed. Naturally, persons of apoplectic parents should be more careful than others. The regime referred to will relate to diet, exercise, baths, and habits in general. In individual cases, the attending physician will be able to advise special measures suited to the particular person.

NEURASTHENIA.

Neurasthenia, nervous exhaustion and nervous weakened and irritable condition which sometimes results from chronic fatigue. They all mean practically the same thing. The depression and mental distress accompanying neurasthenia are often severe enough to excite sympathy and demand relief. The disease, however, is rarely dangerous, and since the patient is practically always bright and intelligent, he is in a position to grasp this fact and get comfort therefrom. The neurasthenic can, therefore, be greatly benefited by enlightment concerning his trouble.

Several symptoms stand out prominently in neurasthenia. It seems that the disease renders the mind and the imagination active. The neurasthenic has almost always taken an inventory of his symptoms and has usually attempted to interpret them. His interpretation is valueless, as a rule. One of the first lessons for the neurasthenic to learn is that he must tell the doctor the facts, but not try to explain their cause. The doctor is the only person who can truly interpret the facts.

A typical symptom of neurasthenia is the fluctuating or changing state of mind. For an hour the patient is buoyant and hopeful; then as a result, maybe, of some trifling circumstance, he goes into a depressed mood, which may last one or several hours. On one day he is sociable, on another resentful, suspicious and distant. Milder cases show this changeableness to a less degree. Possibly the patient simply notices that he is more hopeful and ambitious at certain times than at others. The lesson to be drawn from these facts is that the changing state of mind is not justified by external facts, but is simply a symptom of a fatigued spirit, and should be ignored. When the neurasthenic is in a state of exaltation or happiness, he should remember that in a few hours he may be less hopeful and less happy. When, on the other hand, he is depressed, he should remember that his depression is purely a temporary symptom and that his outlook will be much brighter after a short time. He should try to avoid the extremes of emotion, aiming rather at a comfortable state of mind.

The easy fatigue of neurasthenia is to be taken as a warning against distasteful exertion. No exercise performed against one's inclination can restore the tired nerves. On the contrary, any pleasant recreation can profitably be followed to the point of moderate fatigue. When the fatigue is a pleasant fatigue, the exertion has been beneficial. An unpleasant fatigue points to over-exertion. In each special case, however, the advice of a physician is needed to decide which exercises are best.

The physical symptoms of neurasthenic are too diverse to enumerate. The heart, stomach, eyes, kidneys, sex organs, back and various other organs, participate. The neurasthenic should try to keep in mind the fact that these physical symptoms are based on faulty nerve control of the various organs. It takes a considerable amount of nervous force to keep the body going even during sleep. Every organ is receiving at least some nerve impulses every moment. Whenever one's nerve force is used up by prolonged hard work, by worry, or by any adverse circumstances, there comes a time when the necessary routine nerve impulses are not supplied to certain organs in a perfectly normal manner, and these organs fail to functionate normally. Such an explanation makes clear why one neurasthenic suffers from rapid heart, another from constipation, or another from eye strain. In each instance the physician only can lead the patient back to a normal condition. In the meantime, the neurasthenic should bear in mind that the real seat of his trouble is not in the heart, the stomach or the eye, but in the nervous system.

It will have been gathered from the foregoing that the causes of neurasthenia are prolonged strain, especially mental strain or emotional thrills. The infectious diseases especially grip and typhoid fever, may bring on severe neurasthenia. These causes operate more effectively in those who have inherited a predisposition to neurasthenia. After any illness there follows a critical stage, during which the patient takes up again his daily task. The patient should be in close touch with his physician until all the after effects of disease are gone.

In the prevention of neurasthenia, an annual vacation, plenty of recreation, freedom from worry, an interesting vocation and a satisfactory environment, all play a part. For the cure of neurasthenia, the patient should be determined to get well; should talk freely with his physician, but not discuss his symptoms with casual acquaintances, and should have patience.

STERILIZATION OF DENTAL INSTRUMENTS IMPORTANT.

The possibility of the transmission of disease through the medium of dental instruments has probably been considered by every occupant of the dentist's chair. It constitutes one of the fears with which a patient is possessed the moment he adjusts himself for his period of treatment. Authoritative instances of the conveyance of contagion in this manner are extremely rare, its frequency not being determinable, although few will deny the possibilities of occurrences of this character.

The list of organisms which may contaminate dental instruments is formidable, but this does not mean that the diseases of which they are the causative factors necessarily ensue if they are accidentally carried into the mouth. Their presence upon dental instruments is, however, an indication of what the surgeons call poor technique. In surgery poor technique is usually attended with disastrous results, but in dentistry errors of this character may produce no ill effects. In spite of this relative freedom from danger, dentists are determined that their methods shall equal the highest standards.

Cleanliness should be the primary consideration in all dental operations. The white coat of the operator represents more than comfort; it is the symbol of neatness. The dentist who works with unclean instruments, who provides soiled linen, or who places a common drinking glass before his patient, should be judged accordingly. Fortunately

the members of the profession who do these things are criticised and suffer from loss of patronage, so that there is a strong tendency on the part of dentists to maintain their surroundings above reproach. With the sterilization of instruments some carelessness may manifest itself, partly owing to the fact that many instruments are injured by such processes, are too complicated to be treated in this manner, or that the public is not competent to detect errors of technique. However, the public is rapidly learning the value of aseptic methods and the proper equipment is now found in nearly all dental offices.

Thorough studies of the sterilization process have recently been made for dentists by the United States Public Health Service at the request of various dental associations throughout the country, and in a recent publication of that service detailed information will be found as to the accepted methods for the sterilization of all dental instruments.

CANCER CAN BE CURED!

When there is mention of "a cure for cancer," the invincible hope of mankind takes a new flight. But so far time has laid low every vaunted "sovereign cure," and the reaction has too often brought on an aggravated attack of pessimism. The history of cancer is indeed composed in very large part of the sad record of various methods of treating the disease that have been hopefully but unsuccessfully tried. As yet there is no cure for cancer—no panacea—that will heal up all forms of the disease. It seems as if a cure of that kind would be little short of a miracle, and this is not the age of miracles. Several agents have been discovered that do in certain cases have a curative effect on malignant growths, but tumors vary so in their nature that it is hardly to be expected that all kinds of growths should yield to one form of treatment. The manner of treating each kind is necessarily different. In the great majority of instances, therefore, it is still safe to say that the only reliable remedy is early surgical removal. Some rare or unusual cases may yield to other forms of treatment without the use of the knife, and certain agents are used for palliative treatment with wonderfully beneficial effect, even in hopeless, inoperable cases. But so many remedies that have in the experimental stage given promise of value in the treatment of cancer have turned out to be practically useless that the public grows increasingly cautious of acclaiming a new "cure." Premature announcement concerning the efficacy of a particular form of treatment gives rise to much hysterical discussion and raises false hopes that make sufferers defer recourse to surgical treatment, which would save them if submitted to in time. The havoc of these false alarms impels the repetition of the remark of an eminent research worker, who incisively states that "anything but surgery, where surgery is possible, in the treatment of cancer is malpractice." This may seem a radical view, but until medical science produces a method of treatment that is recognized and sanctioned by the profession, we had better "watch our step" in the matter of cancer cures. By the same token we may still insist that the chief defense against the enemy cancer at the present time is not a drug, nor a serum, nor a ray, nor a miracle, but simply the knowledge of the danger signals by which to recognize the disease early and have it promptly attended to by competent advisers. In early recognition and treatment lies the hope of cure.—*The Jour. A. M. A.*

MISCELLANEOUS

SUCCESSFUL PROSECUTION FOR THE VIOLATION OF THE MEDICAL PRACTICE ACT.*

Dear Doctor: It may be of interest to the profession of Texas to know that the famous, long-haired, magnetic healer of Cisco, R. G. Milling, was recently convicted of practicing medicine without having registered a certificate under the present Medical Practice Act, and was fined $50 and one day in jail. There were twelve indictments. The jury inflicted the penalty in the first case. There was a mistrial in the next two cases, subsequent to which the accused entered a plea of guilty in two cases, and the other nine were dismissed. Judge Burkett's charge to the jury in the first case is so pertinent that it may be of interest to your readers, and I am sure it will be of interest to you. It follows:

"The State of Texas vs. R. G. Milling. No. 3023. In the County Court of Eastland County, Texas. September Term, A. D. 1915.

"Gentlemen of the Jury: This is a case in which the defendant, R. G. Milling, stands charged by indictment with the offense of practicing medicine without first having registered a certificate or license from the State Medical Board, as required by law. I charge you the following as the law applicable to this case:

"Our statutes provide that it shall be unlawful for anyone to practice medicine in any of its branches upon human beings within the limits of this State who has not registered in the office of the District Clerk of the County in which he resides, his authority for so practicing, as herein prescribed, together with his age, postoffice address, place of birth, school of practice to which he professes to belong, subscribed and verified by oath; the fact of such oath and record shall be indorsed by the District Clerk upon the certificate. The holder of the certificate must have the same recorded upon each change of residence to another County, and the absence of such record shall be prima facie evidence of the want of possession of such certificate.

"The term 'practicing medicine' is defined by our statute as follows: Any person shall be regarded as practicing medicine within the meaning of this act: (1) Who shall publicly profess to be a physician or surgeon and shall treat or offer to treat any disease or disorder, mental or physical, or any physical deformity or injury, by any system or method, or to effect cures thereof; (2) Or, who shall treat or offer to treat any disease or disorder, mental or physical, or any physical deformity or injury, by any system or method, or to effect cures thereof, and charge therefor directly or indirectly money or other compensation.

"Our statute further provides that any person practicing medicine in this State in violation of the provisions of this act shall, upon conviction thereof, be fined in any sum not less than fifty dollars nor more than five hundred dollars, and by imprisonment in the County jail for a term not exceeding six months.

"Now, if you believe from the evidence, beyond a reasonable doubt, that on or about the 1st day of April, 1915, and anterior to the presentment of this indictment in the County of Eastland and State of

*Editor's Note.—In the November, 1912, Journal, page 195, appears under the caption "An Important Opinion on the Medical Practice Act" the full opinion of Judge Prendergast, of the court of appeals, in the R. S. Millin, Appellant, vs. No. 1541, the State of Texas, Appellee, which makes good reading in connection with the present communication.

Texas, the defendant, R. G. Milling, was then and there a resident of said County and State, and did then and there practice medicine upon a human being within the limits of the State of Texas and County of Eastland, and you further believe from the evidence, beyond a reasonable doubt, that defendant did then and there in the manner hereinbefore and herinafter stated, treat a physical disease and disorder of one Mrs. C. E. Moss, and did charge the said Mrs. C. E. Moss therefor, directly or indirectly, money or other compensation, and you further believe from the evidence, beyond a reasonable doubt, that the treatment was given, if any in fact were given, for the purpose of effecting cures, and you further believe from the evidence, beyond a reasonable doubt, that the defendant did treat physical diseases and disorders for compensation in the County of Eastland and State of Texas, without having first registered in the District Clerk's office of Eastland County, Texas, his authority for so practicing as required by law, as above set out, then you will find the defendant guilty and assess his punishment at a fine not less than fifty dollars nor more than five hundred dollars and confinement in the County jail for a term not exceeding six months.

"You are further charged that under the laws of this State, masseurs in their particular sphere of labor, who publicly represent themselves as such, are exempt from the law requiring a certificate of authority to be recorded before practicing that art; however, in this connection, you are charged that if the defendant, representing himself as a masseur, undertakes to cure diseases or disorders for pay by means of massage treatment for that purpose, and represents himself as able to cure diseases or disorders in that manner, he would be required to have his certificate of authority recorded in the office of the District Clerk of the County in which he resides before he so practices or offers to practice.

"The defendant in a criminal case is presumed to be innocent until his guilt is established by legal and competent evidence beyond a reasonable doubt, and in case you have a reasonable doubt as to the defendant's guilt in this case, you will acquit him and say by your verdict, 'Not guilty.'

"You are the exclusive judges of the facts proved, of the credibility of the witnesses and the weight to be given to their testimony, but you are bound to receive the law from the court as herein given you, and be governed thereby.

"Joe Burkett,
"County Judge, Eastland County, Presiding."

The County Attorney, Hon. Cyres B. Frost, is rather emphatic in his assertion that the Medical Practice Act is as easy to enforce as any other law, and he proceeded in these cases just as he would under any other grand jury indictment. In proceeding against Milling, the County Attorney had to contend against the "business interests" of the community, a number of business men volunteering to go before the juries in an effort to convince them that Milling was a good man, and doing no harm. Milling is a good spender, and, of course, brings business to the community. As president of the County Medical Society, I was invited to be present in court and represent the medical profession, and the defendant was denied the usual privilege of contending that the whole matter was an unfair effort to persecute because of the competition involved. The profession usually has no opportunity, of course, to show that the proceedings are in the interest of the public health and honest dealing, and that a law has been violated, the enforcement of which the officers of the law, the court and the jury are obligated to undertake.

Dr. Milling appears to have returned to his practice, and whether or not prosecution will be undertaken at anotner time remains to be seen.

Fraternally yours,
Joseph W. Gregory, M. D.

Cisco, Texas, November 27, 1915.

A SWINDLE IN AUTOMOBILE SUPPLIES.

Have you been approached by a suave salesman who is willing to let you in on a ground-floor proposition to obtain your automobile supplies at cost? If you haven't, you may be. He is abroad in the land, and physicians should look out for him. They are his special "game." A certain "T. A. Buck" claims to be the representative of the "Auto Owners' Service Company of Toledo, Ohio," and offers for $10 a yellow paper certifying that the purchaser "is a member of the Auto Owners' Service Co., and shall receive all automobile accessories and supplies which he may purchase from the said company at cost f. o. b. factory for one year." But the trouble is that neither the city nor telephone directory of Toledo contains the name of the concern or the name of T. A. Buck. Further, owners of public garages and other concerns of Toledo that ought to know, say that no such company exists in that city. As one of our correspondents puts it, there have been "several dozen" of such companies in Toledo, "all of which border on the fraudulent." Toledo, however, is not the only city that has been honored as headquarters for concerns that offer to furnish automobile supplies at less than cost. Physicians must be on the watch. There are reliable concerns that furnish automobile supplies on favorable terms, but these as a rule do not have traveling men selling certificates of membership for cash. In any event, if contracts are to be entered into, let the company send the bill in the regular way. This will give time for investigation and cool thinking after the smooth-talking representative has departed, which is far better than doing the cool thinking after the cash has departed.—*The Jour. A. M. A.*

METHODS OF ACQUIRING DRUG HABIT.

Dr. Joseph C. Doane, chief resident physician of the Philadelphia General Hospital, in a recent study of 153 cases of habitual users of drugs, arrived at the following analysis with special reference to methods of acquiring the habit:

Association	86
Doctor's prescriptions	14
Smoking opium	23
Other drugs, mainly cocaine	4
To keep awake	2
To cause sleep—quiet nerves	17
Not stated	7
Total	153

—*The Modern Hospital.*

EXPELLED FOR FEE-SPLITTING.

The first trial of a member of the Missouri State Medical Association on a charge of fee-splitting and offering to split fees was held recently by one of our component societies. The offender was found guilty by the board of censors and expulsion recommended. The report of the censors was adopted by the society and the sentence carried out. The expelled member was also a Fellow of the American Medical Association, which affiliation he loses.

In attacking some evils, the best way to abolish them is to apply the whole force of our strength against them at the outset. This was done in the agitation against fee-splitting; the practice immediately decreased in all parts of the State where

it had been prevalent, and has disappeared altogether in some places where it had threatened to gain a foothold. We need not expect, however, that simple threats to punish offenders, or prohibitory resolutions and laws will efface this blot on our escutcheon. We must do more than that—we must drive out of our ranks those who persist in dishonoring their profession and deceiving their patients.

It is now three years since the Association adopted the by-law against fee-splitting, and the case mentioned above is the first prosecution for violation of the section. This seeming indifference is due, not to the inactivity of the officers of the Association, but to the fact that it has been diffficult to obtain evidence supported by competent testimony. This evidence must, of course, come from some member who has knowledge of the offense and will produce documentary proofs to substantiate the charge—a step that is offensive and repugnant to the finer feelings of the honest practitioner. Therein lies the grip of the fee-splitter. Having Oslerized his own sense of honor by avarice and the greed for gold, he gambles with fate against exposure by men of purer motives and higher ideals. But conditions are rapidly changing. The fee-splitter is finding himself ostracized by the respectable men in the organization, and these men are beginning to understand that the only way to purify our ranks is to expose and punish offenders.

The trial and expulsion of the guilty member referred to above is a warning to others that an awakened profession will purge itself of members who defy the traditions and lower the tone of our profession.—*The Journal of the Missouri State Medical Association.*

THE AUTOLYSIN TREATMENT OF CANCER.

Richard Weil, New York (*Journal A. M. A.*, Nov. 6, 1915), reviews the results of the Horowitz treatment of cancer, as carried out by Dr. Beebe in the General Memorial Hospital in New York City. In accordance with a well-defined policy of the hospital which approved the test of proposed therapeutic measures in cancer, Dr. Beebe was permitted to make a trial, he stating that he was in possession of complete knowledge of the composition and formula. Dr. Beebe was given the privilege of applying the treatment in a considerable number of cases, under the general clinical supervision of Dr. Weil. Only such cases were taken as could not be helped materially by other means available. In nearly all the cases the patients were given the benefit of radium or Roentgen-ray treatment in addition to the autolysin method. That all the patients were moribund or in a very serious condition was not the case. Some of the patients put in Dr. Beebe's hands were in apparently good physical condition, though the nature of their ailment, as often happens in cancer, made successful treatment by other methods impossible. If the treatment had any real value it should have been shown in such cases. Since Jan. 1, 1915, twenty-three cases have been treated in the wards of the hospital with autolysin by Dr. Beebe. Of these, fourteen patients died in the hospital and eight were discharged unimproved. Only one is at the present, to the best of Weil's knowledge, in a condition that could be considered an improvement over that at the time of his admission. Although the general outcome of the cases was not affected by Beebe's treatment, the clinical course was somewhat altered. The method caused, when injections were made into the tumors, suppuration and sloughing as is characteristic of irritant or destructive substances in such cases, and did not in this constitute any advance over former methods. Subcutaneous injections given distant parts of the body were followed sometimes by improvement in the appearance of ulcerated tumors, but no greater than that seen to follow the ordinary surgical dressings usually employed in such cases, and to these Weil attributes the temporary change for the better. The more general good effects claimed by Beebe from autolysin, such as, relief of pain and insomnia, and increase of appetite, were what might be looked for, Weil claims, by the hopefulness aroused by a lauded new remedy. Contrasted with such occasional effects is another set of results very inadequately mentioned by Beebe in his articles. Half the patients at least were most unfavorably affected by the local injections. The pain was often so severe that the patients refused to accept the treatment. The swelling often gave distress, and in two instances the treatment appeared to be responsible for an almost fatal hemorrhage, and these unquestionably outweighed the very questionable advantages claimed. Weil discusses particularly two of the cases published by Beebe, in which all the improvement observed is, he suspects, due to the simultaneous Roentgen-ray treatment, which often gives brilliant, if temporary, results. He deplores the publicity used as leading to hopes that cannot be realized, causing useless expense and long and painful journeys to receive treatment. His own personal belief, based on observation, is that autolysin treatment is useless and liable to do damage rather than good. The article is illustrated.

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1915, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonoffieial Remedies:"

Mercurialized Serum, Mulford.—A solution of mercuric chloride in normal horse serum, diluted with physiologic sodium chloride solution. It is proposed for the treatment of syphilis, particularly the cerebrospinal type. It is supplied as:

Mercurialized Serum, Mulford, No. 1.—One 30 Cc. ampule containing the equivalent of 1.3 mg. (1/50 gr.) mercuric chloride with rubber tube and intraspinal needle.

Mercurialized Serum, Mulford, No. 2.—One 30 Cc. ampule containing the equivalent of 2.6 mg. (1/25 gr.) of mercuric chloride, with rubber tube and intraspinal needle.

Mercurialized Serum, Mulford, No. 3.—A package of ten 30 Cc. ampules, each containing the equivalent of 1.3 mg. (1/50 gr.) of mercuric chloride, with rubber tube and intraspinal needle.

Mercurialized Serum, Mulford, No. 4.—A package of ten 30 Cc. ampules, each representing 2.6 mg. (1/25 gr.) mercuric chloride, with rubber tube and intraspinal needle.

Mercurialized Serum, Mulford, No. 5.—8 Cc. mercurialized serum, Mulford, containing the equivalent of 22 mg. (1/3 gr.) of mercuric chloride in a syringe graduated in fourths, with needle.

Mercurialized Serum, Mulford, No. 6.—A package of ten syringes, each containing 8 Cc. liquid, which represents 22 mg. (1/3 gr.) of mercuric chloride. H. K. Mulford Company, Philadelphia, Pa. (*Jour. A. M. A.*)

Radio-Rem. Outfit No. 4.—An apparatus designed for the production of radio-active drinking water by the action of radium sulphate contained in terra-cotta plates. It consists of two plates contained in

250 Cc. bottles; when the bottles are filled with water, the two plates impart about 1.8 microcurie (5,000 Mache units) to the water in twenty-four hours. For action, uses and dosage, refer to the article on radium in New and Nonofficial Remedies. Schieffelin & Co., New York. (*Jour. A. M. A.*)

Histamine Hydrochloride.—The hydrochloride of the base beta-iminazolylethylamine (histamine). It is a valuable reagent for the standardization of pituitary preparations.

Imido, Roche.—A name applied to histamine hydrochlorid.

Ampules Imido, Roche.—Each ampule contains 1.1 Cc. of an aqueous 1-in-1000 solution of Imido, Roche (1 Cc. contains 1 mg.). Hoffmann-La Roche Chemical Works, New York City. (*Jour. A. M. A.*)

Betanaphthyl Salicylate.—The salicylate acid ester of beta-naphthol. It passes the stomach unchanged, but is split into its constituents in the intestinal tract. It is believed to act as an intestinal antiseptic and to act in a similar way in the bladder. It is said to be useful in intestinal fermentation, catarrh of the bladder, rheumatism, etc. Mallinckrodt Chemical Works, St. Louis, Mo. (*Jour. A. M. A.*)

Betol.—A name applied to Betanaphthyl salicylate (which see). Merck & Co., New York. (*Jour. A. M. A.*)

PROPAGANDA FOR REFORM.

Williams' Syrup of Malt.—The Council on Pharmacy and Chemistry reports that Williams' Syrup of Malt is ineligible for New and Nonofficial Remedies because it is an official article marketed under an unofficial title; because unwarranted therapeutic claims are made for it, and because the claims made are apt to lead the public to depend on it as a curative agent in serious diseases. (*Jour. A. M. A.*, Sept. 4, 1915.)

Hydragogin.—The Council on Pharmacy and Chemistry reports that Hydragogin (C. Bischoff & Co.), advertised as a "most wonderful diuretic and cardiac tonic," is a shotgun mixture of semi-secret composition, marketed under a therapeutically suggestive name and advertised by means of unwarranted therapeutic claims. Hydragogin is said to be a preparation of digitalis, strophanthus, squill and a saponin. The report explains the objection to the administration of digitalis and strophanthus in fixed proportion because of the varying rates of absorption and excretion of these two drugs. It further cautions that since digitalis bodies must often be given to the point of beginning toxic action in order to obtain the full therapeutic effect, it is obvious that the administration of a mixture of digitalis, strophantus, saponins and squill is especially liable to induce serious toxic effects which cannot be distinguished from the symptoms of the disease. (*Jour. A. M. A.*, Sept. 4, 1915.)

Iodum-Miller.—The A. M. A. Chemical Laboratory reports that Iodum-Miller was found to be essentially a solution of iodine and potassium iodide in glycerin, containing 1.68 per cent, of free iodin. The Council on Pharmacy and Chemistry reports that Iodum-Miller was not eligible for New and Nonofficial Remedies because incorrect statements are made in regard to its composition; because unwarranted therapeutic claims are made for it, and because the application of a trade name to a simple solution of iodin is not to be countenanced.—(*Jour. A. M. A.*)

Iod-Izd-Oil (Miller's).—Analysis in the A. M. A. Chemical Laboratory indicated Iod-Izd-Oil (Miller's) to be a simple solution of iodin in liquid petrolatum, containing not 2 per cent. of iodin, as claimed, but only 0.42 per cent. The Council on Pharmacy and Chemistry found the preparation ineligible for New and Nonofficial Remedies because the composition is not correctly stated, and because the application of a trade name to a simple preparation of this sort is irrational. (*Jour. A. M. A.*)

Hexa-Co-Sal-In. — Hexa-co-sal-in (Hexa-Co-Sal-In Company, Red Bank, N. J.) is advertised as "a condensation product of familiar composition," and that it is "colchi-magnesium salicylate with anhydrous hexamethylenamin." An examination made by the A. M. A. Chemical Laboratory showed that Hexa-co-sal-in is a simple mixture of hexamethylenamin, magnesium salicylate and some colchicum preparation. The Council on Pharmacy and Chemistry reports that the statement of the composition of this preparation is false; that unwarranted therapeutic claims are made for it, and that the mixture is unscientific. (*Jour. A. M. A.*)

The Soy Bean.—The soy bean is of medical interest: (1) because it contains the enzyme, urease, which converts urea into ammonia and carbon dioxide, and hence is used to estimate urea in urine; and (2) because soy-bean products have been recommended as foods for diabetics. Street and Bailey of the Connecticut Agricultural Experiment Station report that although the soy bean contains about 25 per cent. total carbohydrates, only about 8 per cent. composed of sugar, starch and dextrin, may be considered objectionable in a strict diabetic diet. Thus the sugar-forming carbohydrates contained in soy beans fall well within the limit of 10 per cent. regarded as safe for diabetics. (*Jour. A. M. A.*)

Somnoform.—This was originally composed of ethyl chloride 60 per cent., methyl chloride 35 per cent. and ethyl bromide 5 per cent. Now it is said to contain but 1 per cent. ethyl bromide. Like ethyl chloride, Somnoform has been used as a substitute for nitrous oxide before ether anesthesia and for short operations, but has been mostly used by dentists for extractions. It is doubtful if the mixture has any advantage over ethyl chloride. The mortality is less than that of chloroform, but twice that of ether and four times that of nitrous oxide. (*Jour. A. M. A.*)

Some "Patent Medicines" for External Application.—The following statements of composition are indicated by the reports of various State Boards of Health, the Government chemists and the A. M. A. Chemical Laboratory: Amarol, a "complexion beautifier," is composed of Epsom salt 95 per cent. and borax 5 per cent. Anti-Freckle Lotion (Gustin's) contains mercuric chloride 1.5 per cent., alcohol 2 per cent. and water 96.5 per cent. Calocide, for "foot trouble," is sodium chloride 22.44 per cent., borax about 37.58 per cent., alum about 39.35 per cent., tannin small amounts. Cerol, which "cleans and clears the skin," is boric acid, stearic acid and perfume. Clearola, which will whiten the skin, is sulphur. Cuticle Acid, to "remove dead skin," is alcohol 10 per cent. and oxalic acid 2 per cent. Derma-Royale, for skin affections, is a dilute alcohol-glycerin solution with small amounts of camphor, myrrh, benzoin and possibly other aromatics in suspension. Eptol, a wrinkle remover, is essentially borax 37 per cent., soap and stearic acid 63 per cent. Fatoff was found to be essentially soft soap. Gloriol Balm, a vanishing toilet cream, is composed of stearic acid, soap and borax 23.7 per cent., water 76.3 per cent. Gloriol Glowene, said to be a substitute for soap, is soft soap. Zemo, for eczema, pimples, dandruff and similar affections, appeared to be a watery-alcoholic solution containing

methyl salicylate, thymol, borax, tannic acid, glycerin, menthol and a phenol-like body. (*Jour. A. M. A.*)

Lactopeptine and Elixir Lactopeptine.—Lactopeptine is sold under the claim that it contains pepsin, diastase, pancreatin, lactic acid and hydrochloric acid. In 1907 the Council on Pharmacy and Chemistry reported that Lactopeptine was practically inert—"essentially a weak, saccharated pepsin," devoid of tryptic activity. An examination made by the Council in 1913 confirmed the previous findings. Nearly four months after publication of the last report, the manufacturers protested against the report, claiming that Lactopeptine possessed pancreatic activity and contained "loosely combined" hydrochloric acid. The Council now reports that an examination of the market supply demonstrated that a few recently manufactured specimens showed slight (therapeutically negligible) tryptic activity, but that most showed none; the amount of hydrochloric acid was insignificant. Again declaring Lactopeptine and Elixir Lactopeptine ineligible for New and Nonofficial Remedies, the Council points out that, whatever the tryptic activity of the mixture, it is therapeutically useless. Mixtures of pepsin and pancreatin are irrational. The two substances are not indicated in the same conditions, nor can they act together. Under physiologic conditions such mixtures are chemically impossible. In a liquid medium the two substances destroy each other. (*Jour. A. M. A.*)

A Therapeutic Absurdity.—Lactopeptine, whether in the form of an elixir, powder or tablets, is a therapeutic absurdity. Even if fresh specimens of the powder, possessing slight tryptic activity, have any advantage over old ones, there is no way of telling which the patient is likely to get, for the trade packages of Lactopeptine are undated. In liquid preparations like Elixir Lactopeptine, pepsin and pancreatin destroy each other. (*Jour. A. M. A.*)

The N. F. Imitation of Elixir Lactopeptine.—Nearly forty years ago the essential worthlessness of Lactopeptine and Elixer Lactopeptine in the the pharmaceutical profession. In spite of this knowledge the pharmacists have included imitations of Lactopeptine and Elixir Lactopeptine in the National Formulary under the titles Compound Powder of Pepsin and Compound Digestive Elixir. The N. A. R. D. Journal, devoted to the business rather than the professional side of pharmacy, defends the Compound Digestive Elixir on the ground that "physicians keep right on prescribing it." The pharmaceutical profession should consider that pharmacists will in the end lose the confidence of the medical profession and the public by the tolerance of worthless pharmaceuticals. (*Jour. A. M. A.*)

Cardui: The Story of a Nostrum.—Harper's Weekly (October 23) traces the growth of the Wine of Cardui business. The author, stated to have been employed by the manufacturers, denies that the nostrum will perform the many wonders claimed for it by the manufacturers, and says that there is one miracle that Cardui can perform—it can make money. (*Jour. A. M. A.*)

CHEAP IMITATIONS OF WELL-KNOWN PREPARATIONS PEDDLED TO DRUG STORES.

Several shipments of worthless imitation drug products have been seized by the officials in charge of the enforcement of the Food and Drugs Act. Itinerant peddlers are selling to drug stores large quantities of preparations made up and labeled in imitation of high-priced patent medicines of foreign origin. Only small quantities of the genuine medicines have been imported since the war began, causing a great increase in prices. Unscrupulous manufacturers are attempting to reap a harvest by substituting for the genuine medicines cheap chemicals with no medicinal value whatever. In order to make it difficult to trace these preparations to the parties responsible for their manufacture, they are not usually distributed through the regular channels of commerce, but are peddled about to drug stores by itinerants, who make immediate delivery at the time of sale.

A preparation put up in imitation of "Neosalvarsan," a medicine which has largely displaced the preparation known as 606 in the treatment of syphilis, is being distributed to drug stores in this manner. A sample labeled "Neosalvarsan," which was recently examined by the department, was found to be nothing more than salt colored with a coal-tar dye, none of the genuine neosalvarsan whatever being present. The label on this product was an exact reproduction of the genuine imported neosalvarsan, or it was an original container refilled with the imitation article.

The fraud is held to be particularly flagrant, according to the medical experts of the department, not alone because a worthless preparation is sold for a high price, but mainly because neosalvarsan is usually administered by injection directly into the blood of the syphilitic patient. The cheap substitute is not only worthless in the treatment of this disease, but when injected directly into the blood might work considerable injury.

Other preparations which are peddled to druggists and purport to be acetylsalicylic acid, commonly known as aspirin, a medicine of foreign origin, regularly prescribed by many physicians for certain ailments, have been seized by the officials in charge of the enforcement of the Food and Drugs Act, because an analysis showed that the products were worthless imitations.

Owing to the manner in which these preparations are peddled about, it is difficult to trace the interstate shipment of any of them, and in cases where there has been no interstate shipment the Federal Food and Drugs Act has no jurisdiction. On information furnished by the Federal authorities some of these imitation goods have been seized by city officials who had authority under State laws to proceed when there had been no interstate shipment.

A SAFE RED FIRE MIXTURE.

After an examination of the oxygen requirements of the carbon in some formulae it was found that an excess or a deficiency existed with which to combine with the oxygen of the strontium nitrate and the potassium chlorate.

It was, therefore, decided to work out a new formula omitting some of the old features and using a strontium salt very rich in oxygen; this was found in strontium chlorate which answered the purpose excellently, but still had the drawback of all chlorates that a mixture of them with carbon are rather dangerous and liable from the general nature of chlorates to spontaneous decomposition when in contact with organic or carbonaceous matter.

New Formula.

No. 1. Mixture.

Strontium chlorate	1,000 parts

No. 2 Mixture.

Wood charcoal (powdered)	250 parts
Starch (powdered)	250 parts
Shellac (coarsely powdered)	400 parts

When it is desired to burn the red fire, No. 1 and No. 2 mixture are poured on a large sheet of paper and intimately mixed on the spot by rolling the

powders on the paper by tipping alternate sides until the mixture is uniform.

I find that commercial strontium chlorate contains some moisture, and I get rid of it before powdering the salt, by drying at 212 deg. Fahr. for 24 hours.

When ignited this red fire burns calmly without explosive violence and is not difficult to ignite, the flame is a brilliant crimson, and the formula is calculated to leave a slight excess of carbon after ignition. The starch is used as a reducer of the reaction owing to the emission of water vapor when carbohydrates are ignited. I can recommend this red fire as perfectly safe if mixed in accordance with my directions.

The object of keeping No. 1 and No. 2 mixtures separate until the red fire is actually to be burnt is to prevent any possibility of decomposition of the chlorate starting the ignition of the ready-mixed mass.—*The Scientific American.*

NEWS

Mortality Among Physicians in Serbia.—Official statistics show that eighty-two Serbian physicians have died of typhus since the beginning of the war, while of the foreign physicians on duty in Serbia thirty-five have succumbed to typhus or typhoid fever.—*Scientific American.*

Waco Doctor Fined for Practicing Without License.—Charles C. Lemley, charged in the County Court with practicing medicine without a license, was found guilty and fined $50 and one hour in jail on Nov. 27. Judge Denton overruled a motion for new trial and the defendant filed notice of appeal.—*Waco Times-Herald.*

Twilight Sleep Films Fail.—The attempt made by the Motherhood Educational Society, Inc., to educate the New York public in regard to twilight sleep by the means of moving pictures, ended in the bankruptcy court recently. The society had planned to send the films around the country in charge of a physician from Freiburg, Germany, who would deliver a lecture while the pictures were being shown.—*Medical Record.*

Sanitary Water Supply for Sweetwater.—The city of Sweetwater now has a water supply that is first class. When Lake Trammell, the new supply, was completed, the City Commission, realizing the importance of supplying the people with clean water, prohibited the use of the reservoir as a pleasure resort for boating, fishing, etc., posted the grounds and put a "horse-high, bull-strong, hog-tight" fence around it. The watershed is practically uninhabited, there being just a few range cattle on it. The water is free from gypsum and the reservoir, which was formed by damming Sweetwater Creek, holds approximately a billion and a quarter gallons.

Training School for Nurses to be Established at Southwestern Insane Asylum.—A training school, where young women, at no cost to themselves, may qualify as trained nurses, will be established at once at the Southwestern Insane Asylum. The board of managers of the institution has approved the plans, and the charter of the organization was issued recently at Austin. It will be known as the Southwestern Training School, and it is incorporated by Dr. Beverly T. Young, superintendent of the asylum; Atlee B. Ayres, Albert Steves Jr., William Cassin, Jack W. Neal and other members of the board. There is no capital stock. The idea of establishing a training school where young women may study nursing is said to have originated with Dr. Young, who saw the need for it. He took the matter up with the board, which gave its consent, with the result that it was decided to incorporate. It is understood the institution will be opened soon.—*San Antonio Light.*

Plans of National Conference of Charities and Correction for Indianapolis Meeting Announced.—Announcement has been made of business and local committees of the Forty-third National Conference of Charities and Correction, which is to be held at Indianapolis May 10-17, 1916. One of the most interesting committees is that on change of name, for it has been advocated by some members that a title be selected which more truly indicates the nature of the body, which is the national union of social workers. In preparation for the reception of the conference at Indianapolis committees have been organized throughout the State for the purpose of making a great exhibit of the progress of Indiana in matters of social welfare during the past 100 years, as the centennial of her admission to the Union will be celebrated in 1916. Organized social work, both public and private, has been growing by leaps and bounds in this central region, and it has been thought that the record of attendance at the last national conference (2,600) may be more than equaled. The president, Dr. Francis H. Gavisk of Indianapolis, has had more than thirty years' experience in social service in that city, and occupies a unique position in that he is the first Catholic elergyman ever to preside over this conference. The last issue of the *Bulletin* of the conference is devoted to a review of social legislation during the year 1915. Nearly 500 measures are described and classified, varying in character from the authorization of women police in New Jersey to the establishment of suspended sentences for wife deserters in Hawaii.

Cincinnati Sanitarium Opens New Hospital Building.—The Cincinnati Sanitarium, of Cincinnati, Ohio, has established a new hospital, Rest Cottage, for purely nervous patients. The general plan is that of a comfortable home. The construction is substantial, of blue limestone and stucco, with sound-proofing of all partition walls. There are twelve rooms for patients, and the house and its surroundings, while homelike and attractive, are in keeping with modern hospital ideas as regards sanitation. Rooms have private bath in connection, and patients may have one or more rooms, as desired. The heating is by hot water system. Modern appliances of a curative nature in hydrotherapy, electrotherapy and mechanotherapy are installed, and competent directors will carry out the physicians' instructions. The solaria are general lounging-roms, where all can meet and where music may be enjoyed; or if perfect quiet is desired, that may be had in the private rooms. All objectionable features of the culinary department have been obviated by placing this necessary adjunct on the top floor, where there are no patients' rooms. The diet and service conform to individual requirements and are under the direction of the physicians. The tastes of patients will be considered to the fullest possible extent. The physicians and management have put years of experience in hospital training into the construction and equipment of this small health resort, and offer to the medical profession a suitable place for the treatment of functional nervous disorders due to malnutrition and faulty metabolism. Admission to this building is strictly limited to nervous and nutritional disorders proper; to that end the attending family physicians are requested to assist to the extent of recommending only suitable persons.

SOCIETY NEWS.

EL PASO DISTRICT—No. 1.

Dr. F. P. Miller, El Paso, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, El Paso, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

El Paso—Dr. C. F. Braden, El Paso; 1st and 3rd Mondays, September to May inclusive.

Reeves-Ward-Pecos—Dr. O. J. Bryan, Pecos.

THE EL PASO COUNTY MEDICAL SOCIETY met October 4th with twenty-seven members present. Dr. Lloyd and Captain Davis of the United States Army Medical Corps were visitors. Dr. Howard Thompson read a paper on *What We May Reasonably Expect*, which was discussed by Drs. Werley, Safford, Lloyd, Ramey, Richmond, Stark, Gallagher, Cathcart, Braden, Rawlings, Garrett, Thomas, Tappan and Strong.

THE EL PASO COUNTY MEDICAL SOCIETY met November 1. Fifteen members were present. Drs. Waite and Mason of El Paso and Dr. McKinney of the United States Medical Corps were visitors. A motion prevailed that no paper be published in the Bulletin that had not been first read before the El Paso County Medical Society. The following program was rendered: *Recent Advances in Prophylaxis and Specific Treatment of Diphtheria*, Dr. C. A. Reinemund, discussed by Drs. Safford, Waite, Haffner, McNeil, Gallagher, Werley, Wesson, Rawlings, Strong, Thompson, Stark and Jackson; *The Surgical Treatment of Retention of Urine*, Dr. Strong, discussed by Drs. W. L. Brown, Haffner, Jackson and Gallagher.

THE EL PASO COUNTY MEDICAL SOCIETY met November 15, with twenty-six members present. Dr. W. W. Waite was a visitor. The secretary made a report of the year's activity of the society. Dr. M. P. Schuster read a paper on *Syphilis of the Larynx*.

DISTRICT PERSONALS.—Dr. and Mrs. M. B. Wesson of El Paso have returned from the East, where they spent some time visiting friends, Dr. Wesson attending the clinics.

Drs. S. B. Richardson and H. H. Higgins have been appointed inspectors of the public schools of El Paso.

Dr. J. W. Laws of Lincoln, N. M., has bought a tract of land six miles from El Paso, for the purpose of establishing a tuberculosis sanitarium. He has moved his family to El Paso.

Dr. Jim Camp of Pecos was recently operated on in El Paso for appendicitis.

Dr. W. R. Jamieson and wife of El Paso are making an extended trip to Canada, the old home of Dr. Jamieson.

Dr. and Mrs. L. G. Witherspoon have returned from a trip to the doctor's old home in Indiana.

Dr. F. P. Miller of El Paso has returned from a trip to Washington.

Drs. R. L. Ramey, Hugh Crouse and F. P. Miller of El Paso attended the Medical Congress at Boston the latter part of October.

BIG SPRINGS DISTRICT—No. 2.

Dr. N. J. Phenix, Colorado, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Ector-Midland-Martin-Howard—Dr. W. F. Johnston, Big Springs; 2nd Thursday quarterly.

Fisher-Stonewall—Dr. R. I. Grimes, Sylvester; 1st Tuesday in January and March.

Jones—Dr. A. McK. Jones, Anson; 2nd Tuesday monthly.

Knox-Haskell—Dr. Judd E. Hammond, Munday.

Mitchell—Dr. T. J. Ratliff, Colorado; 2nd Monday January, April, July and October.

Nolan—Dr. A. A. Chapman, Sweetwater.

Scurry-Dickens-Kent—Dr. J. M. Bannister, Snyder; 1st Tuesday in January, April, July and October.

Taylor—Dr. L. J. Pickard, Abilene; 2nd Tuesday monthly.

PANHANDLE DISTRICT—No. 3.

Dr. W. C. Dickey, Memphis, Councilor.

District Society—Dr. T. D. Frizzell, Quanah, President; Dr. J. J. Crume, Amarillo, Secretary.

Secretaries of Sections—Surgery, Dr. F. B. Bryan, Childress; Medicine, Dr. E. H. Snyder, Canadian; Gynecology and Obstetrics, Dr. B. L. Jenkins, Clarendon; Pediatrics, Dr. S. P. Vinyard, Amarillo.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Childress—Dr. F. B. Bryan, Childress; 1st Tuesday monthly.

Collingsworth—Dr. H. B. Worley, Wellington; Tuesdays.

Dallam-Hartley-Sherman—Dr. R. L. Owens, Dalhart; 2nd Tuesday.

Donley—Dr. T. H. Ellis, Clarendon; 1st Thursday monthly.

Foard—Dr. R. L. Kincaid, Crowell; 2nd Monday quarterly.

Hale-Swisher—Dr. E. F. McClendon, Plainview; 2nd Tuesday monthly.

Hall—Dr. W. C. Mayes, Memphis; 2nd Tuesday monthly.

Hardeman—Dr. T. D. Frizzel, Quanah; 2nd Thursday monthly.

Hemphill-Roberts-Lipscomb-Ochiltree—Dr. H. C. Caylor, Canadian; 1st Monday monthly.

Lubbock-Crosby—Dr. J. T. Hutchinson, Lubbock; 1st and 3rd Tuesdays monthly.

Potter—Dr. J. J. Crume, Amarillo; 2nd Monday monthly.

Wichita—Dr. L. F. Stripling, Wichita Falls; 2nd Tuesday monthly.

Wilbarger—Dr. Richard W. Hix, Vernon; 3rd Monday monthly.

SAN ANGELO DISTRICT—No. 4.

Dr. S. C. Parsons, San Angelo, Councilor.

District Society.—Dr. J. M. Horn, Brownwood, President; Dr. R. H. Cochran, Coleman, Secretary. Next meeting will be in Brady.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Brown—Dr. H. C. Eargle, Brownwood; 2nd Tuesday monthly.

Coleman—Dr. R. Bailey, Coleman; 1st Thursday monthly.

Lampasas—Dr. W. D. Francis, Lampasas; 1st Tuesday March, June, September and December.

McCulloch—Dr. J. S. Anderson, Brady; 1st Monday monthly.

Menard-Kimble—Dr. W. M. Fenley, Menard.

Runnels—Dr. E. R. Middleton, Winters; 2nd Thursday monthly.

Tom Green—Dr. G. W. Nibling, San Angelo; Tuesday before full moon.

THE TOM GREEN COUNTY MEDICAL SOCIETY met October 19, in regular session. A letter of thanks was received from the Civic League for the assistance of the members of the society in holding a better baby contest. Drs. C. P. Keys of San Angelo, C. W. Williams and W. F. Chambers of Bronte were elected to membership. Dr. J. H. Crum of Dallas gave a very interesting talk on *The Preparation of Antitoxin*. Dr. A. H. Sealey, who had been for some time under charge of unethical conduct, upon his own statement that he had no apology to offer, was on September 14 suspended from the society.

THE FOURTH DISTRICT MEDICAL SOCIETY met in San Angelo November 2d and 3d. The invocation was delivered by the Rev. Normal F. Marshall. Mayor George J. Byrd welcomed the visitors to the city. Dr. S. E. Thompson of Carlsbad welcomed the visitors in behalf of the Tom Green County Medical Society.

During the regular sessions the following program was rendered: *Artificial Pneumothorax in the Treatment of Tuberculosis*, Dr. A. C. Shortle, Albuquerque, N. M.; *Report of Cases*, Dr. J. B. Shelmire, Dallas; *Pellagra*, Dr. Wilmer L. Allison, Fort Worth; *Early Diagnosis of Tuberculosis*, Dr. Robert B. Homan, El Paso; *Involutional Melancholia*, Dr. J. A. McIntosh, San Antonio; *Hemorrhage*, Dr. M. M. Walker, Wichita Falls; *Phthisiophobia*, Dr. R. S. Loving, Dallas; *Diagnosis and Treatment of Hysteria*, Dr. N. D. Buie, Marlin; *Tetanus*, Dr. W. A.

Duringer, Fort Worth; *Calomel*, Dr. Wm. Lowe, Lometa; *Pituitrin*, Dr. W. M. Strozier, Santa Anna; *Surgical Mutilations as They Effect Longevity in Life Insurance*, Dr. John L. Davis, Waco; *Treatment of Placenta Previa*, Dr. Clay Johnson, Fort Worth; *Conserve Our Women, They Are Our Mothers*, Dr. H. L. Wilder, Glen Rose; *Postoperative X-Ray Treatment of Cancer of Equal Importance With the Operation*, Dr. Geo. D. Bond, Fort Worth; *The Dangers of Chronic Appendicitis, if Treated Other Than Surgically*, Dr. Wade H. Walker, Wichita Falls; *Relation of the Surgeon to the Abdominal Appendix*, Dr. S. P. Vinyard, Amarillo; *Surgical Aspect of Eye, Ear, Nose and Throat Work*, Dr. Frank D. Boyd, Fort Worth; *Surgical Treatment of Placenta Previa*, Dr. E. L. Beck, Texarkana; *The Present Status of Gall Bladder Surgery*, Dr. J. S. McCelvey, Temple; *Appendicitis—The Last Word (?), Based on One Thousand Operations*, Dr. L. P. Allison, Brownwood; *Obstetrics—Diagnosis and Procedure*, Dr. T. A. Morrison, Grosvenor.

Tuesday afternoon wives of the members of Tom Green County Medical Society gave a tea to the visiting ladies in the San Angelo Club rooms.

On Tuesday evening a banquet was given by the society in honor of the visitors. Covers were laid for 150. Dr. S. C. Parsons, councilor for the district, acted as toastmaster, and the following toasts were given during the evening: *Should the Medical Profession Be Represented in Matters of State?* Dr. Clay Johnson of Fort Worth; *Southern Men and Medicine*, Dr. Bacon Saunders of Fort Worth; *Does Conservation of Human Life Interest Our Government?* Dr. Frank D. Boyd of Fort Worth; *What Contributes to the Success in Medicine?* Dr. J. J. Terrill of Temple; *This Merry Old World, and the Days, Be They Bright or Blue*, Dr. W. M. Lowe of Lometa; *Talent in the Making of a Physician*, Dr. A. W. Carnes of Hutchins; *The Science of Medicine in the Development of the Commonwealth*, Hon. Milburn McCarty of San Angelo. The banquet was most sumptuous, and the speaking lasted until past midnight.

On Wednesday evening the visitors were conveyed to Carlsbad, where, after the State Tuberculosis Sanatorium had been inspected, they were given a barbecue by Drs. J. B. McKnight and S. E. Thompson of Carlsbad. This function was a success in every particular. The visitors, by vote, unanimously thanked Drs. McKnight and Thompson for the diversion.

In all about one hundred and nine members of the Fourth District Society registered. This was beyond doubt the best meeting ever held by the society.

Brady was selected as the place for the 1916 meeting.

SAN ANTONIO DISTRICT—No. 5.

Dr. W. A. King, San Antonio, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Atascosa—Dr. W. E. Seale, Charlotte; 2nd Tuesday monthly.

Bexar—Dr. W. H. Hargis, San Antonio; from October to May. 1st Thursday, Section on Eye, Ear, Nose and Throat; 2nd Thursday, Section on Medicine; 3rd Thursday, State Medicine, Public and Personal Hygiene; 4th Thursday, Obstetrics and Gynecology.

Comal—Dr. L. G. Wille, New Braunfels; 2nd Saturday quarterly.

Guadalupe—Dr. M. B. Brandenburger, Seguin; 1st Tuesday monthly.

Gonzales—Dr. W. T. Dunning, Gonzales; 1st Monday monthly.

Karnes—Dr. R. C. Youngblood, Falls City; bi-monthly.

Kerr-Kendall-Gillespie-Bandera—Dr. Wm. Lee Secor, Kerrville; 1st Monday alternate months.

La Salle-Frio—Dr. R. L. Graham, Cotulla; meets quarterly.

Medina—Dr. J. H. Fletcher, Hondo; 2nd Wednesday monthly.

Uvalde-Edwards—Dr. S. B. Hudson, Sabinal; 1st Tuesday monthly.

Val Verde—Dr. D. A. York, Del Rio; 1st Monday monthly.

Wilson—Dr. J. E. Sparks, Floresville; quarterly.

CORPUS CHRISTI DISTRICT—No. 6.

Dr. W. N. Wardlaw, Corpus Christi, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bee—Dr. E. P. Cayo, Beeville; Monday quarterly.

Cameron—Dr. C. W. Skipper, Westville; 2nd Wednesday monthly.

Hidalgo—Dr. W. R. Dashiell, Mission; 5th day monthly

Jim Wells—Dr. M. J. Perkins, Alice.

Kleburg—Dr. R. L. Mathews, Kingsville.

Nueces—Dr. A. W. Davisson, Corpus Christi; 1st and 3rd Fridays monthly.

Refugio—Dr. Roy T. Goodwin, Sinton.

San Patricio—Dr. L. J. Manhoff, Aransas Pass.

Webb—Dr. E. H. Sauvignet, Laredo; 1st Wednesday monthly.

AUSTIN DISTRICT—No. 7.

Dr. T. J. Bennett, Austin, Councilor.

District Society—Dr. Z. T. Scott, Austin, President; Dr. W. A. Harper, Austin, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bastrop—Dr. P. Chapman, Smithville; 2nd Tuesday bimonthly.

Burnet—Dr. H. S. Garrett, Bertram.

Caldwell—Dr. Edgar Smith, Lockhart; 2nd Tuesday monthly.

Hays—Dr. P. J. Shaver, San Marcos.

Lee—Dr. C. M. Jones, Ledbetter; 1st Tuesday in June, September, December and March.

Llano—Dr. C. F. Darnall, Llano; 2nd Tuesday monthly.

San Saba—Dr. C. L. Behrns, Cherokee; 2nd Tuesday each month.

Travis—Dr. J. C. A. Eckhardt, Austin; 2nd Thursday monthly.

Williamson—Dr. E. M. Wood, Georgetown; 2nd Wednesday.

DEWITT DISTRICT—No. 8.

Dr. Walter Shropshire, Yoakum, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Houston, April, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Colorado—Dr. W. G. Youens, Colorado; 2nd Wednesday February, April, June, August, October and December.

DeWitt—Dr. B. J. Nowierski, Yorktown; 3rd Wednesday monthly.

Fayette—Dr. C. M. Hoch, LaGrange.

Lavaca—Dr. Walter Shropshire, Yoakum; 2nd Tuesday monthly.

Matagorda—Dr. S. A. Foote, Bay City; 2nd Wednesday monthly.

Victoria-Calhoun—Dr. F. L. Sargeant, Victoria; 20th monthly.

Wharton-Jackson—Dr. W. B. Huey, El Campo; 3rd Friday monthly.

THE DEWITT COUNTY MEDICAL SOCIETY AND THE VICTORIA COUNTY MEDICAL SOCIETY held a joint meeting in October. Twenty-four members were present. Dr. Frobese presented a case, a negro male, in whom a diagnosis of brain tumor was made.

Dr. Curtis read a paper on *Treatment of Aneurism* and presented a patient who had an aneurism of the right common carotid artery. Dr. Malsch read a paper on *Controlling the Cervical Stumps in High Amputation of the Cervix*. Dr. Reuss read a paper on the *Three Surgical Bugbears*. The meeting was concluded by a banquet, which was greatly enjoyed by all present.

THE DEWITT COUNTY MEDICAL SOCIETY met November 17. Eight members were present. Dr. B. J. Nowierski presented a negro, male, with an aneurism of the right femoral artery and vein, due to a gunshot injury. Drs. O'Quin and Reuss reported a case of complete artresia of the upper third of the vagina, in a pregnant multipara. The next meeting will be held in Victoria, upon the invitation of the Victoria-Calhoun Society.

SOUTHERN DISTRICT—No. 9.
Dr. W. W. Ralston, Houston, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Houston, April, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Austin—Dr. Otto E. Steck, Bellville; 1st Tuesday quarterly.
Brazos—Dr. R. J. Hunnicutt, Bryan.
Brazoria—Dr. A. J. Pollard, Alvin; 1st Thursday after 1st Monday.
Burleson—Dr. T. L. Goodnight, Caldwell.
Fort Bend—Dr. R. M. Munroe, Richmond.
Galveston—Dr. M. L. Graves, Galveston; last Friday monthly.
Grimes—Dr. E. A. Harris, Navasota; 1st Wednesday monthly.
Harris—Dr. B. T. Van Zant, Houston; every Friday night.
Madison—Dr. J. E. Morris, Madisonville; last Tuesday monthly.
Montgomery—Dr. H. W. Earthman, Conroe; 2nd Monday monthly.
Waller—Dr. R. E. Bing, Waller; 1st Monday quarterly.
Walker—Dr. J. W. Thomason, Huntsville; 2nd Tuesday bi-monthly.
Washington—Dr. R. H. Lenert, Brenham; quarterly.

SOUTHEASTERN DISTRICT—No. 10.
Dr. A. R. Sholars, Orange, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Houston, April, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Hardin—Dr. Lee Selman, Olive; last Saturday monthly.
Jasper-Newton—Dr. D. McMicken, Kirbyville; 4th Wednesday quarterly.
Jefferson—Dr. B. P. Holland, Beaumont; 1st Monday monthly.
Nacogdoches—Dr. T. J. Blackwell, Nacogdoches; 2nd Wednesday monthly.
Orange—Dr. A. R. Sholars, Orange; 1st Tuesday monthly.
Polk—Dr. T. H. Bates, Camden; 1st Wednesday monthly.
Sabine—Dr. W. T. Arnold, Jr., Hemphill; 2nd Wednesday monthly.
Shelby—Dr. J. H. Windham, Shelbyville; 2nd Tuesday monthly.

EASTERN DISTRICT—No. 11.
Dr. C. C. Nash, Palestine, Councilor.

District Society—Dr. E. B. Parsons, Palestine, President; Dr. E. H. Vaughn, Tyler, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Anderson—Dr. E. B. Parsons, Palestine; 1st Monday monthly.
Angelina—Dr. J. C. Van Nuys, Lufkin; 1st Tuesday monthly.
Cherokee—Dr. T. H. Cobble, Rusk; 4th Tuesday monthly.
Freestone—Dr. E. V. Headlee, Teague; 1st Tuesday monthly.
Henderson—Dr. A. H. Easterling, Athens; 1st Mondays.
Houston—Dr. W. W. Latham, Crockett; 2nd Tuesday monthly.
Leon—Dr. V. L. Smith, Jewett; 1st Tuesday in April; 2nd Tuesday in October.
Panola—Dr. A. M. Baker, Carthage.
Rusk—Dr. W. P. White, Henderson; 2nd Tuesday quarterly.
Smith—Dr. L. P. Tenney, Troup; 2nd Tuesday monthly.
Trinity—Dr. W. H. Pope, Jr., Trinity; 3rd Thursday

CENTRAL DISTRICT—No. 12.
Dr. A. C. Scott, Temple, Councilor.

District Society—H. C. Black, President; Dr. H. F. Connally, Waco, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bosque—Dr. C. C. Cate, Morgan; 1st Wednesday.
Bell—Dr. L. R. Talley, Temple; 1st Wednesday quarterly.
Comanche—Dr. Charles Ory, Comanche; 1st Thursday monthly.
Coryell—Dr. Ed. Graves, Gatesville; last Wednesday bi-monthly.
Erath—Dr. S. D. Naylor, Stephenville; 2nd Wednesday bi-monthly.
Falls—Dr. Aug. Streit, Marlin; 1st and 3rd Mondays.
Hamilton—J. H. Wysong, Hico; 2nd Wednesday monthly.
Hill—Dr. J. E. Boyd, Hillsboro; 2nd Friday.
Hood-Somervell—Dr. G. D. Ross, Paluxy; Wednesday before the full moon.
Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.
Limestone—Dr. M. M. Brown, Mexia; 3rd Thursday bi-monthly.
Milam—Dr. G. B. Taylor, Cameron; 2nd Tuesday bi-monthly.
McLennan—Dr. D. L. Eastland, Waco; 1st Tuesday.
Navarro—Dr. W. D. Cross, Corsicana; 1st Monday.
Robertson—A. J. Sharp, Franklin; 2nd Tuesday bi-monthly.

THE HAMILTON COUNTY MEDICAL SOCIETY met October 11 at Hico. Those present were Drs. Bolding, Colwick, Currie, Wysong, Hall, Durham and Russell of Duffau. The following program was rendered: *Empyema and Its Relation to Pulmonary Consumption*, Dr. Wm. Hobdy; *The Inadvisability of Waiting for Microscopic Findings in Making the Diagnosis of Pulmonary Tuberculosis*, Dr. C. E. Durham; *The Management of the Pre-Phthisical Stage of Pulmonary Tuberculosis*, Dr. J. H. Wysong; *Secondary Tuberculosis of the Uterus and Adnexa*, Dr. M. M. Risinger.

THE JOHNSON COUNTY MEDICAL SOCIETY met in Cleburne October 19. Fifteen members were present. Dr. E. P. Smith of Grandview was elected to membership. The program consisted of a discussion of scarlet fever.

THE MILAM COUNTY MEDICAL SOCIETY met in Rockdale September 14. Twenty members were present. The program was as follows: *Is the Syphilitic Getting a Square Deal?* Dr. I. L. McGlasson, Waco; *Naso-Pharyngeal Headaches*, Dr. C. P. Schenk, Waco; *Diseases Duc to Lower Temperature*, Dr. L. B. Bibb, Austin; *Caesarian Section*, Dr. J. C. Thomas, Taylor.

NORTHWESTERN DISTRICT—No. 13.
Dr. C. B. Williams, Mineral Wells, Councilor.

District Society—Dr. J. H. Eastland, Mineral Wells, President; Dr. R. A. Duncan, Graham, Secretary. Next meeting will be in Seymour, April 11-12, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Baylor—Dr. C. E. Johnson, Seymour; 2nd Tuesday.
Clay—Dr. B. M. Puckett, Henrietta; 2nd Wednesday.
Eastland—Dr. W. P. Lee, Cisco; 2nd Tuesday bi-monthly.
Parker-Palo Pinto—Dr. E. A. Davis, Mineral Wells; 2nd Tuesday monthly.
Stephens—Dr. J. H. Ball, Crystal Falls; 1st Tuesday quarterly.
Throckmorton—Dr. D. C. Wylie, Throckmorton.
Young—Dr. W. H. Logan, Graham; 2nd Tuesday bi-monthly.

NORTHERN DISTRICT—No. 14.
Dr. A. W. Carnes, Hutchins, Councilor.

District Society—R. W. Baird, Dallas, President; Dr. H. L. Moore, Dallas, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Collin—Dr. E. L. Burton, McKinney; 1st Tuesday.
Cooke—Dr. J. R. Lewis, Gainesville; 2nd Tuesday.
Dallas—Dr. R. S. Loving, Dallas; 2nd and 4th Thursdays.
Delta—Dr. C. C. Taylor, Cooper; 1st Monday.
Denton—Dr. W. G. Kimbrough, Denton; Tuesday following 1st Monday.
Ellis—Dr. E. F. Gough, Waxahachie; 2nd Tuesday.
Fannin—Dr. E. H. H. Foster, Bonham; 2nd Thursday monthly.
Grayson—Dr. Davis Spangler, Sherman; 1st Tuesday.
Hopkins—Dr. J. H. Holbrook, Sulphur Springs; 1st Wednesday.
Hunt—Dr. M. L. Wilbanks, Greenville; 2nd Tuesday.
Kaufman—Dr. B. J. Hubbard, Kaufman; 1st Tuesday, February, April, June, August, October and December.
Lamar—Dr. W. W. Fitzpatrick, Paris; 1st Thursday.
Montague—Dr. C. F. Young, Bowie; 2nd Tuesday monthly.
Tarrant—Dr. J. J. Richardson, Fort Worth; 1st and 3rd Fridays.
Van Zandt—Dr. D. L. Sanders, Wills Point; 1st Friday.
Wise—Dr. L. H. Reeves, Decatur; 3rd Tuesday each month.

THE DALLAS COUNTY MEDICAL SOCIETY met in regular session November 26. There was no meeting of the executive body. Dr. W. J. Calvert presented a patient with acromegalia and delivered a most instructive lecture upon the subject, with special reference to this case. The discussion was by Drs. Johnson, Flynn, Gilbert, Baker, Marchman and Cary. Dr. Martin exhibited a skiagraph of the patient's

head and interpreted a tumor in the region of the hypophysis.

Dr. J. M. Martin delivered an illustrated talk on *X-Ray Diagnosis of Stomach Diseases*, showing many interesting slides of the various positions, functions and pathological conditions assumed by this organ. The subject was discussed by Drs. Flynn, Gilbert and Baker.

Dr. W. M. Young read a paper on *The Allen Treatment of Diabetes*. Discussed by Drs. Flynn, Carrell, McBride and Carlisle. In the order of business, Dr. E. H. Cary offered several resolutions, thanking the various institutions and individuals for their generous assistance in entertaining the Southern Medical Association, all of which were adopted.

A resolution, introduced by Dr. Marchman, thanking Mr. P. P. Martinez for donating $1,000 toward a fund for the relief of those suffering from tuberculosis, was adopted.

Dr. S. E. Milliken addressed the society relative to the pledge by the medical profession of Dallas toward securing the National Democratic Convention. Upon motion, the society voted to guarantee $1,000, the amount of the pledge.

A motion by Dr. Marchman prevailed that the Medical Histories of Dallas, as written by Drs. H. K. Leake and C. M. Rosser, be filed in the archives of the society.

Communications were read from Drs. Ralston of Houston, Van Zandt of Fort Worth and Oscar Dowling, commending and congratulating the society for the success of the Southern Medical Association meeting.

Action on pending applications was deferred.

Peace and good will prevailing, the society adjourned.

The Hunt County Medical Society held an open meeting November 16. The invocation was by Rev. F. G. McMurray, after which Rev. N. W. Alderson delivered a short, scholarly address on *The Physician*. Drs. W. R. Cate and B. A. Prestridge of Emory were elected to membership. Dr. C. L. Gregory read a paper on *A Plea for Humanity*. Dr. John O. McReynolds of Dallas delivered an illustrated lecture, showing the ravages of disease due to social life.

Dr. Gregory said that the horse, cow, hog and hen have all been improved by breeding, yet there has been practically nothing done for improvement of the human. He condemned the habits of the young folks in too freely and compromisingly associating with each other, which would lead to the destruction of the virtue of the young girl and the contamination of their offspring after marriage. He closed with a plea to mothers and fathers to safeguard the conduct of their children.

Dr. Joe Becton introduced Dr. John O. McReynolds, a guest of the society by invitation. Dr. McReynolds illustrated his lecture with stereopticon views, showing the ravages of diseases due to "sowing wild oats." The views clearly showed what it means for a parent to be contaminated with such diseases and the results of gonorrhea on the eye of the child, producing blindness in many instances.

NORTHEASTERN DISTRICT—No. 15.

Dr. W. H. Blythe, Mt. Pleasant, Councilor.

District Society—Dr. R. Y. Lacy, Pittsburg, President; Dr. J. N. White, Texarkana, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bowie—Dr. E. M. Watts, Texarkana; 4th Friday.
Camp—Dr. R. Y. Lacy, Pittsburg; 1st Wednesday.
Cass—Dr. J. T. Herndon, Linden; 1st Wednesday.
Franklin—Dr. Z. C. Fuquay, Mount Vernon; 1st Tuesday.
Gregg—Dr. W. D. Northcutt, Secretary.
Harrison—Dr. J. B. Baldwin, Marshall; 1st Tuesday.
Marion—Dr. S. A. Miller, Jefferson; 1st Thursday monthly.
Morris—Dr. R. C. Farrier, Omaha; 1st Tuesday quarterly.
Titus—Dr. W. H. Blythe, Mount Pleasant; 2nd Tuesday.
Upshur—Dr. T. S. Ragland, Gilmer; 2nd Tuesday.
Wood—Dr. V. E. Robbins, Quitman; last Friday monthly.

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

W. H. Hargis, President.....San Antonio.
W. H. Blythe, Vice-President.....Mt. Pleasant.
H. L. Wilder, Secretary-Treasurer.....Glen Rose.

CHANGES OF ADDRESS.

Dr. W. E. Herrin, from Miles to Vickery.
Dr. G. H. Moss, from Palestine to Frankston.
Dr. J. H. Herndon, from Linden to Atlanta.
Dr. Alfred Ahlman, from Knippa to Millett.
Dr. T. K. Proctor, from San Angelo to Sulphur Springs.
Dr. W. A. McDonald, from Rusk to Alto.
Dr. J. C. Falvey, from Beaumont to Fostoria.
Dr. M. F. Kreisler, from Galveston to Austin.
Dr. O. H. Judkins, from Austin to Corpus Christi.

NEW AND REINSTATED MEMBERS.

November 1st to December 1st, 1915.

Brown County—J. W. Pendleton, Burkett.
Collin County—J. W. Largent, J. B. Wright, R. L. Davis, McKinney
Colorado County—A. H. Potthast, Weimar; O. J. Potthast, Galveston.
Galveston County—J. S. Jones, Walter Kleburg, Chas. T. Stone, Galveston.
Hill County—J. P. Wier, Covington.
Hunt County—W. R. Cate, Cumby; B. A. Prestridge, Emory.
Limestone County—R. W. Jones, Oletha.
Van Zandt County—T. F. Lee, Ben Wheeler.

A LETTER TO THE SECRETARIES.*

BY

W. H. BLYTHE, M. D.,

MOUNT PLEASANT, TEXAS.

For the past several months it has been my privilege to read all the war news my time would permit. But, instead of allotting much time to the war, which is a very up-to-date, civilized system of murder, assassination and slaughter, I have tried to keep more informed as regards the effects, which have been more interesting. I chiefly refer to the wounded—not the dead. Until recent months I have had no conception of what the results of war could be, and still less of the great work done by the different aid organizations. It is amazing to think of the scope of territory over which these organizations work, the great sacrifices made by so many doctors, some, in addition to contributing money from their own purses, defraying their own expenses. There are, besides the doctors, the nurses, making in many instances equal sacrifices.

But on another continent, and, by the way, General Huerta landed on it a few days ago, while there is a little morning appetizing recreation in the way of running, jumping, dodging and cartridge explosions in tamaleland, which lies between the Rio Grande and the waters where the Asama has its nose stuck in the mud, there is no war nor rumors of war. Everything is as quiet and peaceful as it was a year ago. Yet there are to be found quite a good many doctors, who practice medicine, talk medicine, talk politics and talk about the big war and lots of other things, and belong to their County Medical Society, who are so exceedingly busy and so

*Read before Annual Session of the State Association of County Secretaries, Fort Worth, May 6, 1915.

absolutely absent-minded that they fail to show up at the meetings of said County Medical Society.

Now, when we consider the great sacrifice of those doctors, and their hard and dangerous work, who are in the war zone, and the comparative ease and comfort of those in Texas, it does appear that it is the duty of the secretary of any County Medical Society that happens to have any paid-up, non-attending members, to use just such means in mobilization as will bring them in and under the colors.

As there happen to be a few such members in most every county, the secretary would be quite excusable should he address them in a loving manner and with pituitrinic terms, about as follows:

"Dr. I. S. Foolbusy and H. E. Forgot, ———, Texas.

"Dear Doctors: Yesterday our County Medical Society met, and you were again absent. In looking over the minutes it is found that you have not attended a meeting this year, and, in fact, only one in the last twenty-seven meetings, yet you were the very first to pay dues, and that, too, without a request. Now the prompt payment of dues is very highly commendable and is fully appreciated, and the money is very much needed, but, Doctor, while the dues are quite essential, it falls far short of making a *medical* society. If you have never given the matter any thought, please do so now; I am sure you will see where the trouble lies. It is possible to carry on a medical society without money, but you and a thousand more can't make a medical society with money alone. You may, then, wish to know what it is that makes a medical society. The only answer known to me is: you; just you and a little sum of money.

"Just remember that our medical society is a live one, and you are members of it; you appear in good standing, yet you attended only one meeting in the past twenty-seven months. Do you think that is fair treatment and justice to yourselves, your fellow-members and to the principles to which we all subscribe? When I see you personally and jack you up about your delinquency as regards attendance, and remind you about the next meeting, you invariably promise to be on hand, sure. Now, the meetings continue to take place as usual and, as usual, you do not put in an appearance; no, neither of you. But you have an excuse, a regular siege-gun excuse. One of you claims to have been so very busy, 'just run to death,' and the other renders the excuse, 'he simply forgot the thing.' Won't both of you, for your own personal benefit, stop and think over this excuse business and analyze your excuses, and see what a predicament you place yourselves in?

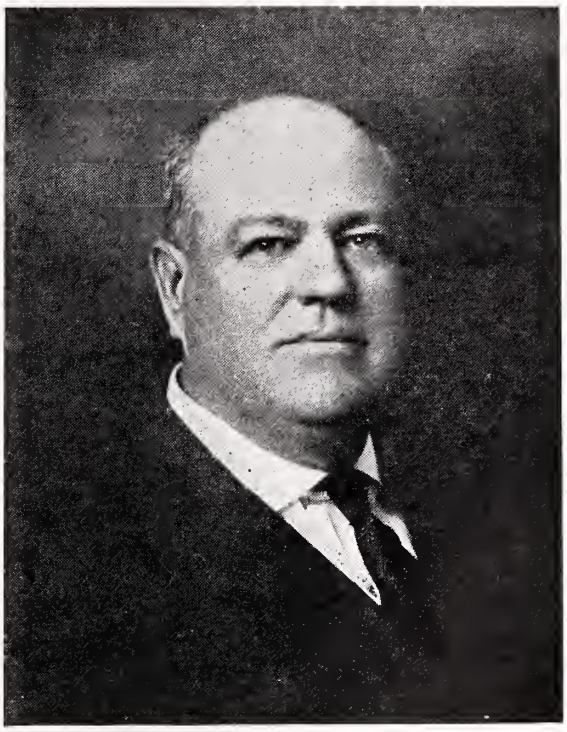
"To look at it one way, Dr. Foolbusy, you must get a partner to relieve you of some of this great strain, or it will surely dehydrate you, for no human machine can stand the pressure long that you are using. And you, Dr. Forgot, allow me to advise and entreat you to immediately seek some up-to-date institution, such as are now advertising in our State Medical Journal, where they give special attention to just such cases as yours. Something is wrong with both of you. Only a few days ago you, Dr. Foolbusy, remarked to one of our merchants here in town that 'you never saw a time before when health conditions were as good as they are now.'

"It appears, Dr. Forgot, that your memory serves you principally in spots. Now, when Mr. Gotrox notified you that your services would be needed at his home in about six weeks, you managed to keep it in mind and was on tap at the appointed time, and with only that one simple notice. Yet you can't remember the date of meeting of your medical society three days.

"Now, both of you take my advice and act at once, as both of your cases are already chronic, and the longer you delay the more profoundly will you become impressed that your excuses are real, genuine and solid facts, and that they are not delusions. When you return, if you will attend the next meeting we will have a full house, a big meeting, a good time and a reunion that has not occurred in many moons."

DEATHS

Dr. Jesse Porter Hendrick of Huntsville died November 22, 1915. Dr. Porter was born in Bowling Green, Kentucky, March 17, 1865. He received a common school education, supplemented by one year in Ogden College, Bowling Green, in 1884-5. He entered the Medical Department of the University of Texas at Galveston as a member of its first class, and graduated from that institution in 1889. After spending one year (1890) as interne in John Sealy Hospital, he was elected superintendent, which position he filled for three years. Leaving Galveston, he practiced medicine for a short time in Houston, removing to Huntsville in January, 1895. In 1892 he was married to Miss Willie Spencer, who, with two sons, survives him. He was a loyal exponent of organized medicine, being aligned with county, district, State and National bodies. He was a member of the local Masonic bodies, including the Commandery, a member of the City Board of Education for many years, and an orthodox and devout communicant of the Methodist church.



Dr. Jesse Porter Hendrick.

Dr. Hendrick was stricken with a violent attack of appendicitis at midnight November 16. He was hurried by special train to Houston and operated upon two hours after his arrival, and fourteen hours after the initial characteristic symptoms.

Though his condition was desperate, he bore the operation well, rallied normally from the anesthetic, and was so natural and cheerful that strong hopes were entertained for his recovery. The progress of his case was uneventful until November 22, when he was seized with a sudden convulsion, and died in a few minutes.

In Huntsville, and in Walker County, Dr. Hendrick was universally beloved. The whole town was stirred at the report of his serious illness, and the citizens asserted the privilege of furnishing the special train which hurried him to the hospital. His death was a grievous blow to the community, which realized its loss and mourns the passing of a good man.

Dr. Eugene S. McCain of Brownsville died October 19, the result of a shotgun wound received from a Mexican bandit.

Dr. McCain was born April 3, 1878, at Montgomery, Louisiana. He received his literary education from the public schools of his native State. He worked his way through the University of Texas, graduating in medicine from that institution in 1903. He began the practice of medicine at Fannin, Goliad County, Texas, where he remained until 1907, when he moved to Refugio. In 1905 he married Miss Allie W. Heard, daughter of W. J. J. and Fannie Wells Heard. In 1912 he received an appointment from Governor Colquitt as quarantine officer at Brownsville, which place he filled with credit. He was reappointed by Governor Ferguson. At the time of his death he was acting as County Health Officer of Cameron County. He belonged to the following organizations: B. P. O. Elks, Woodmen of the World, Knights of Columbus and Praetorians.

Dr. Frederick William Russell, for many years a practitioner in the town of Winchendon, Massachusetts, died at the residence of his son-in-law, Dr. Frank J. Hall, 4119 Cedar Springs avenue, Dallas, Texas, November 20, at the age of 71.

Dr. Russell graduated from Harvard College in the class of 1869, and from the Medical Department of New York University in the class of 1871. He was a hospital steward during the Civil War, and served in that capacity under his father, Dr. Ira Russell, who was commissioned by Abraham Lincoln to organize the hospital service in Tennessee, Missouri and Arkansas; both father and son being in service at the close of the war at Prairie Grove, Arkansas.

After his graduation in medicine he associated himself in practice with his father in Winchendon, where father and son together conducted "The Highlands," a private institution for the treatment of mental and nervous invalids, established by Dr. Ira Russell, and one of the first of its kind. After the death of his father, in 1888, Dr. F. W. Russell continued "The Highlands" up to three years ago, when from ill health he gave up active work to make his home (together with his wife, Mrs. Caroline Marvin Russell, who survives him) with his daughter, Mrs. Frank J. Hall, in Dallas. During his brief residence in Dallas, because of his genial nature and interest in all social and scientific bodies, he made many friends. Having been for many years a member of the Worcester County, Massachusetts, and various other medical societies of New England, he was elected honorary member of the Dallas Medical and Surgical Association, and was elected president of the Texas Harvard Club.

In connection with his medical studies, Dr. Russell made a lifetime study of entomology, and became an entomologist of note. He was a member of the American Entomological Society, and during his life made a rare collection of moths, and wrote some valuable manuscripts and classified and made valuable platés of various specimens of moths of his collection.

His remains were taken by his son, Walter M. Russell of Emporia, Kansas, to Winchendon, and laid to rest in the family lot.

BOOK NOTES

Diseases of the Digestive Organs. With Special Reference to their Diagnosis and Treatment. By Charles D. Aaron, Sc. D., M. D., Professor of Gastro-Enterology in the Detroit College of Medicine and Surgery; Consulting Gastro-Enterologist to Harper Hospital. Octavo, 790 pages. Illustrated with 154 engravings, 48 roentgenograms and 8 colored plates. Cloth, $6.00, net.

In this remarkably erudite work, Dr. Aaron has taken up and brought together in a most efficient and convenient manner, for both ready reference and study, the recent and well-established data in the field he covers, including roentgenographic technic, and the perfected tests and reactions, diagnosis and treatment, eliminating abstract theories and selecting only the assuredly useful.

Opposing the tendency to isolate the diseases of the digestive tract from the other organs, he shows their direct relation to all the other functions. His diagnosis and treatment are clearly explained, following the natural order of these organs and their diseases from the mouth to the anus. He applies the recent progress in the study of the internal secretion; qualitative and quantitative analyses in ascertaining their condition and their effects upon digestion; the best methods for examination of feces; test-meal tests and findings; dietetics; mineral water therapy; hydrotherapy; mechano-therapeutic agencies; oral sepsis, as a predominating factor in the causation of obscure gastro-intestinal disorders; duodenal feeding, and the functions of the liver and pancreas in metabolism, with the fullest respect for recent advances, and the importance of the *x*-ray in limiting exploratory laparotomy and in exactness of diagnosis.

As an internist the author does not lose sight of the importance of surgical interference in proper cases.

The attention afforded the physiology of digestion; methods of examination; the significance of findings; the technic of various treatments; therapeutic agencies and the minute consideration of symptoms, and the diagnosis and treatment in each disease, give this work an encyclopedic completeness. The author is master of his subject and of the art of composition needful to present it. The book will prove of equal value to the practician and specialist.

Manual of Surgery. In two volumes. By Alexis Thompson, F. R. C. S., (Ed.) Professor of Surgery, University of Edinburgh; Surgeon Edinburgh Royal Infirmary, and Alexander Miles, F. R. C. S., (Ed.) Surgeon Edinburgh Royal Infirmary. Fifth edition, revised and enlarged, with 289 illustrations. 12mo., cloth, 801 pages and 948. Oxford University Press, American Branch, 35 W. Thirty-second St., New York. 1915.

Two compact, handy volumes full of ready references for the busy surgeon. Volume I is devoted to General Surgery, while Volume II treats of Regional Surgery. Both are printed on clear, white book paper, 8-point type, leaded lines, well-written

text, clearly told, and helpfully illuminated with many cuts, including a profusion of roentgenographs.

The authors are men of reputation, and are addicted to doing things in their line. And the fact that their work has been sufficiently esteemed by their colleagues to have been demanded in a fifth edition is ample evidence of its worth. For ready, reliable reference, these books bear all the earmarks of success.

The publishers have done well for the comfort and convenience of the subscriber, and these two little volumes will fill a place on this side of the Atlantic which has not been filled.

PRINCIPLES OF HYGIENE. For Students, Physicians and Health Officers. Dr. D. H. Bergey, M. D., First Assistant Laboratory of Hygiene and Assistant Professor of Bacteriology, University of Pennsylvania. Fifth edition, thoroughly revised. Octavo of 531 pages, illustrated. Philadelphia and London. W. B. Saunders Company, 1915. Cloth, $3.00 net.

The fourth edition of this work was reviewed in the JOURNAL, page 253, January, 1913 (which see). This fifth edition has been revised. Many statements found in the fourth edition have been modified or entirely left out, and "in the present edition the attempt has been made to bring the subject-matter up to date as far as possible." Dr. Bergey says, in the preface to this edition, that "the helpful reviews of the fourth edition have aided materially in directing the revision, and grateful acknowledgment is made for the valuable criticisms made by the reviewers."

The text is much improved and both the teacher and the student will find it very valuable in the classroom, and the office man will find it "an engine to his purpose."

THE STRETCHER BEARER. A Companion to the R. A. M. C. Training Book, Illustrating the Stretcher-Bearer Drill and the Handling and Carrying of Wounded. By George M. Dupuy, M. D., Stretcher-Bearer Ambulance Section of C (Norwood) Co., Lambeth Battalion, V. T. C. Pocket size, leatherette, 138 pages, with blanks for notes. Oxford Press. 1915.

The author says: "This little volume is published in the hope that it will prove a useful addition to the Royal Army Medical Corps Training Book; it is especially intended for men who have had no experience of military or ambulance training, to enable them to form a clear idea of a command by seeing the order actually carried out. The principal movements in the stretcher-bearer exercises are shown, but in the carrying and care of the wounded I have gone into further details, as this is the principal part of the calling—to help our comrades in distress."

THE STARVATION TREATMENT OF DIABETES. With a Series of Graduated Diets as Used at the Massachusetts General Hospital. By Lewis Webb Hill, M. D., and Rena S. Eckman (Dietitian), with an Introduction by Richard C. Cabot, M. D., 12mo., cloth, 72 pages. Price $1.00. W. M. Leonard, Publisher, 101 Tremont St., Boston.

This book furnishes to the general practitioner in compact form the details of the latest and most successful treatment of Diabetes Mellitus. It presents the clinical application of the work done in recent years by Dr. Allen at Harvard and the Rockefeller Institute.

This method of treatment carried out by Dr. Allen at the Rockefeller Hospital, and by the staff at the Massachusetts General Hospital, has proved very successful. As Dr. Cabot states in the Introduction, "It seems already clearly proven that Dr. Allen has notably advanced our ability to combat the disease. * * * To all who wish to give their patients the benefit of this treatment I can heartily recommend this book." In a recent address, Dr. Allen said, "However specialists may feel, there is no doubt that a majority of average practitioners feel bewildered and helpless concerning diabetes."

To all who have been tried by this baffling disease, this little volume, with its description of Treatment, Tests and Diets, will be of greatest service.

WOUNDS IN THE WAR AND THEIR TREATMENT, AND RESULTS. By D'Arcy Powers, M. B. Oxon., F. R. C. S. Eng., Surgeon to and Lecturer on Surgery at St. Bartholomew's Hospital; Lieutenant Colonel R. A. M. C. (T. F.). Small, 16mo, leatherette, 108 pages. The Oxford Press. 1915.

A glance at the table of contents will show the value of this little book. The causes of *wounds* in war; immediate treatment of wounds, three chapters; suppuration and its treatment; vaccine therapy in wounds; results of wounds; tetanus and gaseous wounds; amputations. Brief, practical and convenient, from the hands of a man who should know.

SURGERY OF THE HEAD. By L. Bathe Rawling, M. B., B. C. (Cantab.), F. R. C. S. (Eng.), Surgeon and Senior Demonstrator of Operative Surgery, St. Bartholomew's Hospital; Major R. A. M. C. (T. F.). Leatherette, 16mo, 150 pages, illustrated. Oxford Press. 1915.

The contents are: Clinical applied anatomy; injuries to the scalp, skull and brain; fractures of the vault, and concussion, compression and irritation of the brain; treatment; intracranial hemorrhages; fractures of the base of the skull; infections of the brain and meninges; wounds of special regions—mastoid, orbit, jaws; cranio-cerebral topography, and the technique of operations on the skull and brain.

WOUNDS OF THE THORAX IN WAR. By J. Keogh Murphy, M. C. (Cantab.), F. R. C. S., Surgeon to the Miller General Hospital for South London; Surgeon to Paddington Green Children's Hospital; Staff Surgeon R. N. V. R.; late of H. M. Hospital Ship Soudan No. 1. Leatherette, 16mo, 156 pages. Oxford Press. 1915.

This little volume is divided into ten chapters, which are devoted to the discussion of the causes and general features of wounds of the thorax in war; the immediate effects produced by wounds of the thorax; varieties of wounds of the chest; later effects produced by penetrating wounds of the chest; pyothorax; pneumonthorax; gunshot injuries involving the thorax and the upper thoracic abdomen; surgical treatment of wounds of the thorax; rarer septic complications, and bacteriological therapeutic methods.

ABDOMINAL INJURIES. By Rutherford Morison, Professor of Surgery, Durham University; Senior Surgeon Northumberland War Hospital, and W. G. Richardson, M. B., F. R. C. S., Lt.-Col. R. A. M. C. (T.), First Northern General Hospital, and Surgeon Royal Victoria Infirmary, Newcastle-upon-Tyne. 16mo. 116 pages, leatherette, illustrated. Oxford Press. 1915.

The authors begin with a dissertation upon the diagnosis of abdominal injuries; physical signs; methods of examination; contusions of the abdom-

inal wall, special points in diagnosis and treatment; abdominal wounds; penetrating wounds of the abdomen; gunshot wounds of the abdomen in war; perforating wounds of the abdomen; abdominal operations; treatment of hemorrhage and perforation; after treatment of operative cases; complications following operative cases; directions applicable to all operations; operations on the viscera.

INJURIES OF THE JOINTS. By Robert Jones, Ch. M., F. R. C. S. (E. & L.), Director of the Military Orthopedic Hospital, Liverpool; Consulting Surgeon to Queen Mary's Convalescent Auxiliary Hospitals; Major R. A. M. C. (T. F.), 16mo, leatherette, 189 pages, illustrated. Oxford Press. 1915.

Nine chapters discuss outlines of principle; bandaging, massage, movement; pain and stiffness in relation to diagnosis and treatment; stiffness and limitation of movement; contraction of scar tissue; joints of the upper limb; injuries to the spinal column; joints of the lower limbs and ankle joint and foot.

GUNSHOT INJURIES OF THE BONES. By Ernest W. Hey Groves, M. D., M. S. (Lond.), F. R. C. S. (Eng.), Surgeon to the Bristol General Hospital; Consulting Surgeon to the Cossham Hospital; Captain R. A. M. C. (T.). 16mo, leatherette. 128 pages, illustrated. Oxford Press. 1915.

Eight chapters, on pathology; physiology; diagnosis; symptoms and repair; repair of fractures; general principles of treatment; fractures of the jaw and upper limb; fractures of the lower limb; certain methods of treating gunshot fractures.

NERVE INJURIES AND SHOCK. By Wilfred Harris, M. D. (Cantab.), F. R. C. P. (London), Physician to St. Mary's Hospital, and to the Hospital for Epilepsy and Paralysis, Maida Vale; Captain R. A. M. C. (T.), Third London General Hospital. 16mo, leatherette, 127 pages. Oxford Press. 1915.

Divided into two parts, subdivided into four chapters. Part I considers direct effects of injuries of the nervous system, in a chapter on injuries of the brain and the cranial nerves; injuries of the spinal cord; injuries of the brachial plexus, and a chapter on injuries of the lower extremity. Part II discusses nervous shock folowing cerebral injury.

MEDICAL HINTS FOR THE USE OF MEDICAL OFFICERS TEMPORARILY EMPLOYED WITH TROOPS. By J. Edward Squire, M. D. (Lond.), F. R. C. P., D. Ph. (Camb.), Companion of the Order of the Bath; Knight of Grace of the Order of St. John of Jerusalem; Lt. Col. (Hon. Col.); late R. A. M. C. (V.), Consulting Physician Mount Vernon Hospital for Diseases of the Chest, etc.

Contains chapters (14) on acute infectious fevers; diseases of the digestive system; diseases of the respiratory system; diseases of the heart; rheumatism; tonsilitis; body parasites; frost bite; gassing; arsenical poisoning; effects of alcohol and tobacco; malingering; marching; discipline of hospitals.

CEREBRO-SPINAL FEVER. By J. Horder, M. D., Assistant Physician St. Bartholomew's Hospital, Major (Temp.) R. A. M. C., Serving with the the British Expeditionary Force. 16mo, leatherette, 179 pages, 17 illustrations. Oxford Press. 1915. 3s. 6d., net.

The winter of 1914-15 witnessed a widespread epidemic of cerebro-spinal meningitis among the concentrated troops of England. There being no manual of reference on the disease in that country, the disease being only academic with most English physicians, this monograph was prepared by the author.

It contains fourteen chapters on the following phases of the epidemic form of the disease: Definition, nomenclature, history, the meningococcus, antimeninogococcic serum, cerebro-spinal fluid in health and disease, lumbar puncture, detailed symptomatology, complications and sequels, diagnosis, pathogenesis, morbid anatomy and histology, prognosis, treatment and prophylaxis.

The above ten "Oxford War Primers" are uniform in size, shape, binding and type, and are designed for the use of the medical corps on the field and in the hospital. Many were the defects discovered in the sanitary service of Great Britain when she found herself the unwilling target of her enemies, and saw thousands of her patriotic subjects stricken before the hurtling shot, shells and poisonous gases with which they were assailed, and which had been in surreptitious preparation by the Teutons' astute chemists and "efficient" munitionists for half a century. It was necessary to originate a new medical literature and educate men in the art of caring for the victims of a catastrophe, which, in its effects, surpassed all previous outbreaks of barbarism and bloodshed. And in a "pistol-toting" nation, such as ours, should there never be any demand for efficient military surgery on the field of savage war, it is yet well for American medical men to give earnest, studious attention to the lessons found in these instructive and useful little volumes.

And this leads us to suggest that there seems to be rapidly approaching an almost inevitable involvement of our own peace-loving country in the issues of the present embroilment, with its espionage and treachery threading the most sacred paths, desecrating our most sacred precincts, and menacing both our commerce and liberties; and that the slogan "preparedness" should be ingrained with the most earnest and sapient purposes of medical men. No citizen, whether professional, commercial or proletarian, should forget that in these days of imminent danger to home and native land, Americans should be ready.

BOOKS RECEIVED.

Practical Medicine Series, 1915. Obstetrics, Vol. VII, *DeLee*. General Medicine, Vol. VI, *Billings-Salisbury*.

Manual of Surgery, *Thomson-Miles*. (Oxford University Press.)

Regional Surgery, Vol. II. (Oxford University Press).

General Surgery, Vol. I, Fifth Edition. (Oxford University Press.)

Practical Prescribing and Treatment in the Diseases of Infants and Children, *McDonald*. (Oxford University Press.)

Oxford War Primers:

I. Gunshot Injuries of Bones, *Groves*.
II. Abdominal Injuries, *Morrison-Richardson*.
III. Injuries to Joints, *Rawling*.
IV. Surgery of the Head, *Rawling*.
V. Wounds in War, *Power*.
VI. Nerve Injuries and Shock, *Harris*.
VII. Wounds of Thorax in War, *Murphy*.
VIII. Medical Hints, *Squire*.
IX. Cerebro-Spinal Fever, *Harder*.
X. The Stretcher Bearer, *Duprey*.

Murphy's Clinics, October, 1915.

Medical and Veterinary Entomologn, *Herms*, (MacMillan Co.)

Colon Hygiene, *Kellog*. (Good-Health Pub. Co.)

Texas State Journal of Medicine

HOLMAN TAYLOR, EDITOR-IN-CHIEF.
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VOL. XI. JANUARY, 1916 No. 9

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

A HAPPY NEW YEAR.

The JOURNAL wishes its readers a bright, happy and prosperous New Year. We make this wish with full confidence in the future. We honestly believe the time is near when the medical profession will come into its own; the public generally is beginning to realize that the prosperity of the profession means, in exact proportion, betterment of service. While it seems that there are more cults and fakers in the medical field than ever before, the very multiplicity of these senseless fads indicates a state of confusion, a dissolution, as it were, of intrenched ignorance. The people are beginning to realize that it is with the medical profession somewhat as it is with the here-to-fore much divided christian religion; the differences lie, for the most part, in non-essentials—and there is a more or less prevalent idea that these differences have been magnified by those who profit from the division. We see unions and rumors of unions among the sects in religion, and while there is no permanent ground for uniting the various sects in medicine, it is never-the-less a fact that the cultured and educated followers of the more substantial sects, such as homeopathy and eclecticism, are dropping their sectarian designation and assuming merely to practice medicine. This is likewise true, to a lesser degree, perhaps, of the osteopath, who in this State practices medicine unrestricted. The people are beginning to realize that there can be only one science of medicine, and that the legitimate differences of opinion are simply matters of interpretation, and that those differences can obtain within the ranks of the medical profession and without any sectarian designation, just as well as otherwise.

This state of affairs will bring to the honest and qualified physician the support of his people, and knowledge will take the place of superstition in restoring the family physician to his former sphere of influence. In the long ago, people had confidence in us because they believed in our honor and integrity, and because innate superstition led them to attribute to us a power somewhat akin to the miraculous. Unfortunately for us, there have been among our number from time to time many who have entered the profession for gain rather than service, thereby impugning our high professional intentions, and laying us liable to the charge of commercialism. The subsidized press, the confusion of cults, and the overworked brain of the educated and underworked brain of the ignorant, have resulted in a state of affairs more or less disastrous both to the profession and to the public, which must ultimately depend solely upon the honorable physician who has cherished the ideals of his profession. We believe it to be a fact, and it is for that we fervently wish, that the daily increasing knowledge of the public, not only in the matter of public health subjects proper, but in many other problems much more intricate in character, is speedily bringing about a readjustment, in which the family physician, with his ally, the so-called specialist, will surely regain the erstwhile influence of the old time family physician, with confidence founded on knowledge rather than superstition, and in which personality plays the same honored roll as before. In this readjustment, we must do our part, and it appears that we are doing it, and right well. The standards of medical edu-

cation are being elevated to the point where the incompetent and the ignorant may not aspire to the title of doctor of medicine, and competency is being urged on every hand. The Golden Rule is, as it has always been, our ethical guide, and as changing conditions have altered the technical application of the Golden Rule, so have they altered the interpretations of our principles of medical ethics.

And so let us begin the New Year cheerfully. Let us take stock and strike a balance. Let us be sure of our qualifications and of our shortcomings, that we may better the one and lessen the other. Let us increase our knowledge, broaden our experience and improve our skill. Let us be patient and loyal, in our relations with our patients; diligent in our search for the truth and above all, clean and conscientious in whatever we do. Let us be as parents to our patients and as brothers to our fellow physicians; and let us be humble before our Maker. Let us evade publicity, choosing the admiration and respect of our fellow physician, rather than the applause of the public. Let us neither hide our light under a bushel, nor make of it a blinding glare or a lighted candle for the trapping of the moth. Let us realize the sacredness of our profession and the glories of its past, and keep a clear vision for the unlimited possibilities of the future. Let us not be weary in well doing, even though reward is lacking.

A woman physician, Dr. Alice Weld Tallant, once wrote a poem entitled "Healers of Men." We conclude our message with a selection therefrom, which we take from *The Journal of the Medical Society of New Jersey*:

"No grateful people shall raise a shaft
To blazon your glory high,
Though your life was spent to serve their needs
Though it be for their lives that you die.

"And still from the day that you leave the schools
'Till the end when your course is run,
Your work is the noblest work in the world—
God bless you, every one."

FINANCES AND THE PROFESSION.

It has become proverbial that physicians are generally found wanting in all business and financial affairs. This is probably true, on the whole, and there is a good reason for it. In this particular the medical profession differs not a great deal from the other learned professions, which will help explain, if it does not help otherwise. A profession differs essentially from a business or a trade, the real difference lying in the spirit in which the one or the other is followed. The professional man works for the love of his profession and for what he can put in it; the others work for what they can get out of it, in the way of both personal satisfaction and money. Of course, some business men, and many tradesmen, follow their respective vocations, striving to serve rather than to profit, and seeking to excel as a matter of pride in craftsmanship. These are exceptions, just as there are exceptions of like nature in the profession. There are physicians, lawyers, and even clergymen, who work for the sake of gain, and for purely personal returns, and it is this type of exception that is constantly calling for the compromise between professional ideals and commercial instinct. We owe much to modern commercialism in the way of building up communities and great enterprises, which employ many tradesmen and which make towards prosperity; we owe still more to professional ideals, in the way of elevation of ethical and educational standards, and advancement in that knowledge without which the commerce of the country could hardly have attained its present high degree, and without which it could not be sustained, even on the present basis. But for the devotion of those who follow the profession of medicine, the richest countries in this world would still be in the helpless grasp of plagues and epidemics. There would be no Panama Canal, and our cities, for instance, would be forced to spread over the face of the earth instead of stacking up in tiers and layers, as they may now do, thanks to the advancement of sanitary science.

The professional man, in order to attain eminence in his profession, must devote himself almost exclusively to the study of his profession, and his mind is constantly concentrated on subjects as far removed from financial matters and selfish consideration as it is possible to remove them. His prime purpose is to add something to the sum total of human knowledge, and contribute thereby to the welfare of the world. He develops no inclination to participate in commercial enterprises, and if he is successful in his vocation, he has no time for the consideration of such matters. Hence, it is not at all strange that the profes-

sional man, and particularly the physician, is a poor business man. There is an exception, possibly two, to this situation. Many lawyers are eminently successful in finance, having had to deal both in their preliminary study and their subsequent practice, with the details of great business enterprises and commercial pursuits. Indeed, great corporations have for years been in the habit of searching out and placing in positions of responsibility, those lawyers who not only know the law, but have developed an apitude for searching out ways and means of evasion, legitimate and otherwise, and who have shown a special aptitude for interpreting all of the provisions of intricate laws made by poorly equipped legislators. The profession of law has perhaps suffered from this invasion, but many of its followers have profited materially thereby. Occasionally a civil engineer attains great financial prominence, for much the same reason that a lawyer does, in that his profession has touched in many essential points with controlling influences in commerce. Like efforts have been made to invade the ranks of the medical profession, but with less success. The failure, it must be said, is due to a lack of appreciation on the part of commerce of the great service that could be rendered by medical science rather than from a disinclination on the part of physicians to render the service. There is a differnce, however, in the way the science rather than to a disinclination on lawyer deals with the financial side of the case directly, the physician indirectly; the one has his mind concentrated on the money side of the question, the other on the scientific side, the money result following as a natural consequence. It is rather fortunate that this is so, that we may keep our profession clean and above reproach as such, but it is rather unfortunate that the public whom we serve will not see to it that we do not suffer financially in comparison with the other professions.

The Constitution and By-Laws provided for county societies by the American Medical Association, and by the State Medical Association, forbid agreements and schedules of fees, but provides that at least one meeting each year shall be set apart for a discussion of the business affairs of the profession of the county, and that in proper ways the public shall be taught that business methods and prompt collection are essential to the equipment of the modern physician, and that the public suffers more than the profession does when this is recognized. The intention of this provision is that the whole organization shall be cast on an unselfish plane, and that membership shall hinge on professional behavior rather than business principles, and on science rather than self-interest. It was not intended, however, that physicians should neglect to provide for themselves in their old age, and for their families after they are no longer able to care for them by their daily labors. These meetings should be held, and every possible phase of the business side of the practice of medicine should be considered at length. Methods of collection; fees to be charged for services; cost and character of those commodities which are required in the practice of medicine, and investments of every character. Indeed, it is this matter of investing any surplus funds on hand, that is of the greatest importance.

INVESTING MONEY.

Relying upon the reputation of the physician as being an easy mark, nearly every fraudulent investment concern instituted in this country makes a strong play for his money. Probably the faith of these fakers in the gullibility of the physicians is well founded. If this be true, it is high time that a change be made. If a physician has a dollar to invest, he must necessarily invest it upon the opinion of someone else. He has not the time and probably not the talent, to discover the few gilt-edge and profitable investments going the rounds. Usually, the fellow who looks him up, and offers him a sure thing, means that it is a sure thing for someone, not necessarily the physician. Even *bona fide* investments, offered by reputable business men, are not always suited to the financial status of the physician. Many of these investments require reenforcement with other funds as time goes on, and if these reenforcements are not forthcoming, the investor loses that which he has already invested. This is true even with perfectly good investments. There are many angles in this matter of finances, and the average physician makes a sad mistake when he undertakes to deal in a business so intricate in competition with those, equally as bright as he, who have devoted a

life time of study to the business, just as the physician has devoted a life time to the study of his profession, and just as he would be able to defeat the business men in a contest over strictly medical affairs. Probably the only safe and sane procedure for the physician, is to rely upon his banker for advice, and purchase securities the whole story of which he may hear from one in whom he has full confidence, and who knows his entire financial resources. Either that, or recourse to established investment concerns and brokers in all kinds of securities, which have reputations to sustain, and which have succeeded because of their fair and square dealings with their clients. As a rule, pioneering in business is poor enterprise for a physician.

ADOPTING THE ADVERTISING METHODS OF THE FAKER.

Several newspapers in the State have carried full page advertisements, framed after the usual scare-head, fake doctor style, perhaps more uniquely than appropriately designed to call the attention of the people to their unpaid doctor bills. In at least three instances this proposition was brought before county societies and very promptly, although after due deliberation, rejected as a policy. In at least one instance, the rejection was on the ground that the medical profession could not consistently follow the lead of the faker in the matter of advertising, and certainly not in newspapers which reek from front to last page with the most disreputable advertising matter possible within the bounds of decency. In one community, after the society had refused to enter into this questionable enterprise, the newspaper sent its representative among the profession and collected enough funds for pay for running the ad anyway, which was done. This was a direct blow at the authority of the local society to pass upon such questions, and it was an exhibition of poor taste on the part of those who knew of the action of the society, to contribute funds for the purpose.

In the first place, the ad is pitched upon the wrong principle, and if it is to run by any other community of physicians, it should be rewritten. It is copyrighted, however, and no alterations may be made, and we presume those newspapers using it are forced to pay a royalty to the owner. However, any intelligent physician who is conversant with the great fundamental principles underlying the practice of medicine as an economic institution, can write a better one and one which will be more appealing. It is urged that the doctor serves without question, promptly and without regard to his own convenience, and is patient in waiting for his fee. For this reason, and because the individual is likely to again require his services, the doctor should be paid. That is all very good as far as it goes, but it would be much better, and certainly the public would receive it better, it seems to us, if instead it is urged that much better service can be rendered when bills are paid, for the reason that a physician who does not have to worry over the finances of either the present or the future, and who has sufficient finances at hand to take graduate instruction, and to properly equip himself, and who has time for study. Of course, the Golden Rule is good and fits in anywhere.

We repeat, we doubt the economic value of this thing, and are disposed to criticise it as a matter of ethics. We may confidently expect to hear from the National League for Medical Freedom, if not the *Christian Science Monitor,* about this additional evidence of the fact that the medical profession as at present organized, constitutes a medical trust.

INTELLIGENT BUYING.

Although it would be entirely legitimate, this particular reference is not in the interest of our advertising business. We have all along insisted that our readers give our advertisers the preference when buying but unforunately for us, and we believe sometimes for them, all advertisers do not use the JOURNAL, and our readers have occasionally to go elsewhere for service. In view of this fact, the State journals have decided to inaugurate in their co-operating advertising bureau, a department designed to refer their inquiring readers to reliable sources for the commodities they may require. This may not appear at first glance to be a matter of importance, but the desirability of the movement as an absolute protection, becomes more apparent as the subject gains consideration. The average physician purchases what he wants when he sees it; whether it appeals to him as being exactly satis-

factory or not, because he hasn't had the time to make comparisons and draw conclusions. The Co-operative Medical Advertising Bureau, 535 North Dearbon Street, Chicago, Illinois, an agency organized and maintained by the various State journals, with the assistance of the American Medieal Association, has gathered catalogues, descriptive literature and accurate data, covering every conceivable commodity likely to be required by the physician, whether it is advertised in any medical publication or anywhere else, as for that. All inquiries will be carefully considered and the inquirer given the best advice possible under the circumstances. The Bureau has nothing to sell, and there will be no fee for this service. Inquiries may be sent to the JOURNAL office, or to the Bureau direct. It has been all along the intention of the JOURNAL to establish such a service as this, following the lead of the California Association, but the decision of the Co-operative Medical Advertising Bureau to undertake the task relieves us, and we are pleased to most heartily commend the idea to our readers, trusting they will take full advantage of the opportunity thus offered. There is a half page ad in this number of the JOURNAL, fully descriptive of this proposition.

U. S. PUBLIC HEALTH SERVICE LOSES ANOTHER RESEARCH WORKER.

Federal service, particularly that of the public health, should be the most attractive employment in this country. That it is attractive, is demonstrated by the number of bright and highly educated young men who go into the various departments, bureaus and services, from year to year, many of whom eventually attain considerable reputation in their respective fields of endeavor. Probably the U. S. Public Health Service has gathered the most accomplished corps of workers in the government service, and those who have followed medical and sanitary developments in this country for a number of years will recall the numerous services rendered in this respect. Under the able management of Surgeon-General Blue, the Service has developed immensely of late, branching out into fields heretofore untouched. There has been more money for this purpose and it seems that there will be still more to come for the future. With this disposition of Congress to expend money in the matter of medical research and sanitary surveys throughout the country, competent and efficient workmen are going to be required in greater numbers than ever before. It is unfortunate and perhaps disastrous, that the government cannot hold the most expert of its workmen for its own purposes. We respectfully suggest that steps be taken to insure employees in this service a better income, and that a more substantial guarantee for the future be offered.

These remarks are occasioned by the announcement that Dr. John F. Anderson, recently Director of the Hygenic Laboratory of the United States Public Health Service, has resigned in order to assume the management of the Squibb Research and Biologic Laboratories. In addition to the brilliant record of Dr. Anderson in the Public Health Service, his work on the Committee of Revision of the United States Pharmacopoeia, and in the Council on Pharmacy and Chemistry of the American Medical Association, has marked him as a physician of great worth to the medical profession as well as to the cause of the public health. With this additional training, he will prove doubly valuable to the profession as manager of one of the largest and best commercial biologic laboratories in the world, and we feel that we may confidently expect him to keep these laboratories as unsullied by commercial enterprise as is humanly possible. We recall in this connection the example of phylacogen, and are constrained to believe that no such thing will happen in the Squibb Laboratories under the direction of Dr. Anderson. Dr. Anderson states that he has been granted complete scientific independence and absolute power to direct and control the operations of these laboratories, and states that he will be able to continue his efforts for the maintenance of high quality standards and for the upholding of medical ethics, and the application in actual service to the profession of the principles for which he has so long contended. Again, we regret that the government is subject to such losses as these; but perhaps the privately owned laboratories will eventually have to take the place in this country of government laboratories, and perhaps this is simply another step in the evolution.

COMMUNICATING THE VIEWS OF THE PROFESSION TO THE LAITY.

The Texas Surgical Society, as we understand it, comprises those surgeons in Texas who are presumed to devote their time entirely to the practice of surgery, and who are in good standing ethically and professionally in this State. We are not certain whether the requirement is that a surgeon belong to his county society before he can join the Texas Surgical Society, but we will assume that this is true. We know it to be a fact that at the present time the entire membership of this splendid organization is beyond question from a professional and ethical standpoint. On the whole, its objects are to improve conditions generally surrounding the practice of surgery in this State, and to study among themselves, perhaps those problems that would not be of particular interest to the profession at large. The fact that the Section on Surgery of the State Medical Association does not confine its membership to those practicing surgery exclusively, offers an opportunity and leaves an unoccupied field for such an organization as that under discussion. We think this is well established, and the principle of the movement has been threshed out conclusively in the matter of the American College of Surgeons, which seems to have thus far justified itself in the eyes of the profession generally. However, it is not for the purpose of discussing the affairs of the surgeon or these societies of surgeons, that we take the matter up, but rather to discuss the relationship of such special organizations to the general organization, from county society to national association. We hope we may do this without offense, and that the discussion, brief though it be, will serve to make a much needed adjustment.

On another page of this number of the JOURNAL, will be found resolutions adopted by the Hunt County Medical Society, condemnatory of the action of the Texas Surgical Society in causing to be published in the *Greenville Morning Herald,* a newspaper published within the jurisdiction of the said society, the annual address of their President, delivered at San Antonio, in October. The address deals with one of the most intimate and important questions before the medical profession of today. It questions the moral right of the general practitioner to do any except emergency surgery; it charges that the greater portion of such surgery is done in a crude, sloppy and unscientific manner; it assumes to the society the right to deal with ethical problems and participate in legislative representations; offers serious restriction and severely criticises a large majority of the privately-owned and church-owned hospitals of the State, and offers advice as to how these problems shall be met. It is just to add that the article qualifies every statement, and is on the whole quite reasonable, although firm and uncompromising with what the author chooses to assume as harmful. The resolution in question specifically criticises the article, and offers the views of the society on the problems in general, and to some extent in particular. All of these we will pass over for the purposes of this discussion, and revert to the main question: Whether an organization composed of a special, although highly educated, portion of the medical profession, has the right to seek to establish the views of the medical profession on such intimate and important problems as those covered in this article, and particularly whether it shall have the right and authority to do this within the jurisdiction of a regularly constituted county society, without first having the permission of the said society.

Section 8 of Chapter VII, of the By-Laws of the State Medical Association, reads as follows:

"The Board of Councilors shall have the right to communicate to the public and the lay press the views of the profession and of the Association on all matters relating to the public health and to the medical profession. Such communications shall be officially signed by the Chairman and Secretary of the Board."

The question might properly arise, whether the Texas Surgical Society in seeking the publication of the article in question, is in fact attempting to give the views of the profession, or only the views of the society. It is, in fact, giving the views of the society, and not of the State Association, and in doing that the society assumes exactly the position any individual physician would assume, and the questions involved are certainly most intimately connected with the affairs of the profession itself. The personnel of this organization, and the fact that it represents perhaps the most highly trained technical sub-division of the practice

of medicine, gives its pronouncement unusual weight with the public, and to all effects and purposes, the society is speaking for the profession.

The American Medical Association a few years ago, in attempting to solve the ever present and aggravating question of newspaper publicity, at the same time trying to devise a way whereby the public may be furnished with the latest developments in medical science and all necessary knowledge of public health matters, and yet not offer a ready vehicle for the aggrandizement of selfseeking individuals, adopted resolutions suggesting that each county society should have a publicity committee, the function of which should be to give out all such information in the name of the society, and not in the name of any individual. Our provision that the Board of Councilors shall first approve any announcement of the views of the profession, pertains more directly to the internal affairs of the organization, and it may be assumed that a county society is well within its rights in undertaking to instruct the public on public health subjects, as suggested by the American Medical Association. It can easily be understood what conflicts of opinion might arise, and how injurious to the cause in general the apparent confusion would be, should even the county societies assume to pass upon questions of policy in the public press, and how much more so should each special society assume to do the same thing. We have foreseen, and it has before been predicted, that this will prove the rock upon which the College of Surgeons will eventually go to pieces, and we have been hopeful that the danger would be safely avoided.

We do not believe that the Texas Surgical Society had the remotest idea that it was invading the peculiar province of the county societies and the State Association, and we are confident that representations to this effect will be speedily forthcoming. The charge so freely made by certain sections of the lay press, that the whole scheme is one of advertising for the surgeon, is, of course, ridiculous. However, the fact that they have looked upon the matter in this manner, and the fact that a sovereign county society in this State has taken offense at the action, serves to emphasize the fact that a mistake has been made and that any move in this direction by any special society or organization dealing with the science of medicine, will meet with criticism and reproval, perhaps from the public and certainly from the medical profession.

The JOURNAL is favorable to the highest possible development of societies representing the specialties, but must insist that the affairs of the profession and of the public health, be handled by the medical profession as a whole, notwithstanding that it pertains more directly to some special portion thereof. In other words, there can be no criticism offered by a county society of the views of the surgical society on the subjects discussed, or even other subjects of equal importance, provided they are presented through the regular channels furnished for that purpose by the State Medical Association.

LYDSTON SUIT AGAINST THE A. M. A.

Dr. G. Frank Lydston of Chicago, notorious antagonist of the American Medical Association, and the good that it seeks to do, in 1910 announced that he would reform the organization in question. He came to the annual session in St. Louis with a bushel of badges with which to accomplish this by many most desired results. He failed in his accomplishment. From time to time since then, the newspapers have flared up with first one statement and another that the American Medical Association was in a bad way. Eternally those medical journals and pseudo medical journals, which have always stood for unethical advertising and against anything which would curtail their rights and opportunities in this direction, have flayed the Association and lauded the efforts of Dr. Lydston to return this great organization to its members, presumably because it is about to put manufacturers and the medical fakers out of business. Of course, the fight has been on Dr. Simmons, and we all know who and what Dr. Simmons has been fighting.

Recently the *Medical-Record* carried the following statement:

The A. M. A. Elections Declared Illegal.—The Illinois Supreme Court on Monday of this week affirmed the decision of the Appellate Court, handed down some time ago in the suit brought by Dr. G. Frank Lydston, that the election of the American Medical Association held outside the State of

Illinois is illegal. The court has, therefore, ordered the issuance of a writ of mandamus directing the State's Attorney of Cook County to bring quo warranto proceedings against the Association for the removal of the present officers.

It transpires, however, that the Supreme Court's decision in question was simply a ruling, and it referred to Lydston's suit to make the State's Attorney drag the American Medical Association into court, with a view to determining its legal right to exist under its present charter. The American Medical Association has not yet technically been brought into the case. It will at least not have to reorganize until it is brought into court, and it is well enough to wait until that occurs before getting excited over the proposition. The personnel of the Board of Trustees of this great organization is such that we are confident that whatever way the courts may rule, there will be no harm come to the Association, and its great work will in no way be jeopardized.

Referring to Dr. Lydston again, the *McKean County Medical Society Bulletin,* two years ago, commenting on a similar instance to that under discussion, had the following to say:

"The military editor of the *Bulletin* remembers Dr. Lydston.

"He devoted himself to the service of his country during the Spanish-American War. The tented field mas his until he pinched his finger in the tail gate of an ambulance and after that his field was the printed journals, in which he tried to make over the Army Regulations so that they would recognize civilian surgeons as per his notions and his motions.

"The established business of the army surgeon did not appear to be a specialty in medicine to this talented gentleman. He was grieved and peeved at that time by the officers of the army as he has been since by the oficers of the A. M. A."

If it does become necessary to reincorporate the American Medical Association, we beg to repeat the suggestion of *Northwest Medicine,* that the Association be located either in Washington, the Capitol of our country, or at some other central point away from the cliques and eternal agitation at Chicago and in Illinois.

BE CONSIDERATE OF THE SECRETARY.

Much has been written concerning the comparative importance of the office of secretary, and it is generally conceded that a good secretary is a godsend. It has become of late very difficult to secure secretaries who are entirely willing to serve, and many organizations have been forced to adopt the expediency of paying their secretary for services rendered. This is really as it should be, but it so happens with us that our county societies are usually so small, or the funds coming to hand so inadequate, that there is not enough to meet such a requirement. In no organization, probably, is an active secretary more necessary than in ours, and we do not now recall any in which there is more responsibility placed upon the secretary than in our county societies. We urge, therefore, that our members be considerate of the county society secretary, and comply with his requests whenever possible. Particularly is it essential in the matter of collection of dues. The county secretary is required to make his report to the State secretary within a given length of time, and continued postponement of the simple matter of the payment of dues will work no little hardship upon him, or force him to send in a report manifestly partial. No self-respecting official likes to see his work half done, no matter who is at fault. Very few secretaries have the time to repeatedly visit or repeatedly write their members in an effort to collect the usually small amount due, and they should not be expected to do either.

Incidentally, we might urge that this matter of delinquency is all important now, that we have medical defense and that malpractice suits are growing so common. The Council on Medical Defense may not defend a member in any suit arising from an incident occurring during delinquency, no matter how much they may desire to do so. Any member whose name is not on the annual report of his county society, which must be filed with the State secretary on or before March 31st, will be accounted delinquent and from the first of January until the date of actual payment of dues. It is just possible that delinquency will hereafter be established as obtaining in all instances immediately following the first of January and until dues are paid, regardless of the annual report of the county secretary.

The conscientious member will strive to save those who are serving him without pay, all the trouble possible, and the wise member will see to it that his dues are paid without unneces-

sary delay. The State secretary will mail to each member a membership card immediately upon the receipt of his dues. If a member has paid his dues and has not received his card, after a reasonable length of time, either the county secretary or the State secretary is at fault, or there has been some miscarriage somewhere. An inquiry should be instituted at once, and it will be a matter of pleasure to county and state officials to observe that membership is regarded with sufficient care to warrant such proceedings.

THE DATES FOR THE ANNUAL MEETING SET.

At the request of the Committee on Arrangements for the Annual Session, the Board of Trustees has selected May 9th, 10th and 11th, as the dates for the annual session at Galveston. The local arrangement committee recently conferred with the president, the chairman of board of trustees and the State secretary, and not only the dates for the meeting, but many other details were given extended consideration. It may be somewhat surprising, but it is clearly evident even this far in advance, that no session of the State Assoeiation has ever been held under more favorable conditions than those which will surround the forthcoming session at Galveston. It is not too early to begin to prepare for this trip.

LET THE ADVERTISER KNOW IT.

The manager of a certain sanitarium recently complained that his advertising in the JOURNAL was not paying for itself, and threatened to abrogate the contract. Because of the nature of the case we had not expected a great deal to come of the advertising, and out of curiosity we undertook to find out just what the situation was. From a very limited correspondence we learned that one reader alone had sent two patients to this particular sanitarium, because of the advertising in question. There may or may not have been others, but the point is, neither the patients or the physician referring them, took occasion to explain to the management that their patronage of the JOURNAL had anything to do with the matter, and the management failed to make the conneetion. There is no question in the world but the JOURNAL is the best medical advertising medium in this State, and if the advertiser could be impressed with this fact, our advertising patronage would be fixed, and would attain such proportions that the JOURNAL would likely have to be issued semi-monthly, in order to take care of it. We trust our readers will bear this in mind, and not be so modest in the future. In mentioning the service done the advertiser by the JOURNAL, one does not seek credit—the idea is, the advertiser *wants to know* whether he is profiting from his investment.

A RELIABLE BOOK ON LAWS GOVERNING THE PRACTICE OF MEDICINE.

The American Medical Association has recently issued a 500 page digest of the statutory regulation of the practice of medicine in the United States. The book was compiled by the Medico-Legal Bureau of the Association, and is perhaps the most complete book of its kind ever issued. Under appropriate chapters every phase of the practice of medicine is dealt with, and cases recited to cover. These cases refer to both the federal and the state phase of the subject, and we fail to find any question naturally arising in connection with the subject, not covered. About half of the book is given over to abstracts of the Supreme Court's decisions on the regulation of the practice of medicine, arranged chronologically by states, which will prove of immense advantage to anyone having to do with the legality or illegality of the practice of medicine in any particular. The book is well bound, and is in every way suited to its purposes. It is essentially a law book. It has been issued not as a money making venture, but to fill a long felt want. For this reason there are none for free distribution, and we have had to pay for our own copy. A card to 535 North Dearborn Street, Chicago, Ill., will bring full information of this book by return mail.

BIOLOGIC PRODUCTS AT REDUCED PRICES.

We are informed by Dr. W. B. Collins, State Health Officer, that arrangements have been made with a standard producer, to put on the market, primarily for the benefit of the poor but available to all alike, such biologic products as diphtheria and tetanus antitoxins and smallpox and typhoid vaccines, at greatly reduced prices. Distributing stations have been established over the State, in certain drug stores, where they may be procured through the simple process of asking for them. A letter to the Health Department at Austin will bring full particulars—or any local health officer can doubtless impart the required information.

Biologics have until now, at least, been necessarily expensive, and the urgent need for them among the poor has been all too often a serious and distressing problem for the physician. We are pleased that prices are coming more within the reach of the average purchaser, and we feel that Dr. Collin is to be both thanked and congratulated.

ORIGINAL ARTICLES.

THE NEGRO AS A HEALTH FACTOR.*

BY

OSCAR DOWLING, M. D.,

President Louisiana State Board of Health.

SHREVEPORT, LOUISIANA.

The gravity of the subject and the brief time allotted for discussion will make pardonable, I am sure, a plunge into the middle of things without the preliminary of an introduction.

From personal investigations in Louisiana and observations in other Southern States, I am convinced that the negro is the crux of our health situation.

A short time ago we began in New Orleans an intensive survey of negro quarters. Later, a negro inspector and lecturer was employed to visit homes, make inspections, and give in the evening a motion picture show. He has averaged meeting three thousand negroes a month since his work began. Since March 8th, the Health Exhibit Cars have been on an itinerary of the State, making points which are centers of the colored population for the purpose of instructing them and getting information as to how they live. About one-half of the tour is complete. On this trip a special inspector is detailed to make the districts where negroes live and with his report as a basis, letters are sent to Mayors and Health Officers giving details of conditions with recommendations which seem practicable. Records of these activities in photograph and written reports, are on file and I mention them simply that you may know I speak "by the book" and not from hearsay.

In general, the public is aware of how things are, but to apprehend clearly the problem of the negro as a health—or, better, a disease factor—it is necessary to see with one's own eyes and with an open mind the conditions which obtain.

For the past half century the negro has been a part of the migratory procession toward the city. Usually he lives in a segregated area. Usually, too, the section is without a sewer system, drainage, or even city water mains. Garbage lies rotting in the sun, and gutters are filled with stagnant water. Flies and mosquitoes swarm and every canon of public sanitation is ignored.

In the smaller towns conditions are similar. The water supply is from a shallow well, a dilapidated cistern, a rain-barrel or a spring. The open closet is obvious, likewise the efforts of pigs and chickens to spread over as great a space as possible, filth, the kind most dangerous to health.

In the rural sections less than fifty per cent of the negro homes and a very small per cent of the schools have a privy of any type. Water often is had from springs which can not be other than contaminated.

In housing, conditions are even worse. The greedy landlord profits by the "gun-barrel" shanty or the "ark," and by the rows of small houses with no sanitary conveniences. In the survey of New Orleans we found a row of seventy-five of these without a sewer connection. It took over a year and a fight in the courts, to have the necessary 225 connections installed. Lack of light and air and overcrowding, are common. Filth and vermin are the rule. One report says, "A family of twelve lives in a three-room cottage. They sleep without any ventilation and are as filthy as pigs. They go half-clad, and from three to four sleep in one bed, some sleeping in the cook room." I knew of one instance where a family of eleven lived in one room. Is it any wonder that "Church row," "Smoke town," "Black bottom" and "Frogamore," are terms applied to these sections and without thought as to differentiation of those negroes who may be making an effort and those who are essentially lazy and shiftless?

Habits are the reflection of environment—children of the white race have to be trained in the art of keeping clean; trained to enjoy the physical comfort which is the concomitant of cleanliness. Without facilities or incentive to right habits, the negro knows nothing of practices which are conducive to health. Among many, bathing is not thought of and regular hours, as to meals or sleep, equally unknown. The food is of the cheapest variety and as a rule badly cooked. They live from "mammy's basket" or they cook, at intervals, with little interest in preparation or excellence, or live from the "cook shop." A colored woman who has had wide experience says that the average negro family lives principally on meat (bacon) and bread. A woman whom I know, of the better type, spends for herself, her two daughters and a step-daughter, about $1.00 a day for food. Negroes apparently are loath to go to bed; they seem to sit up late from force of habit. In a great number of negro families, the sick are never bathed and their bed clothing and clothing are not changed often for weeks at a time. Visiting the sick is a diversion in which all negroes indulge, in common with Sunday excursions.

The negro is a whiskey addict; often he is a cocaine fiend. Moral habits are twin sisters of the physical—"if a mother, father, three

*Read by invitation before the Section on State Medicine and Public Hygiene, State Medical Association of Texas, Fort Worth, May 4, 1915.

grown daughters, men boarders'' and several children sleep in two small rooms, lack of modesty, promiscuity, illegitimacy and sexual disease surely follow.

The consequences of conditions, habits and customs inimical to health are logical. In the *Bulletin,* issued March 20, 1915, by Mr. Wm. J. Harris, Director of the Census, Department of Commerce, there are pertinent figures. A few of these may be convincing. In the 57 cities included in the table, the average death rate among negroes in 1910 was 27.8; that among the whites 15.9, per thousand; in 24 Southern eities, the rate (average) for the negroes was 29.6 and for the whites 16.9. The table presenting cause of death shows that deaths among negroes, as compared with whites, are *relatively* more numerous from malaria, tuberculosis of the lungs, other forms of tuberculosis, pneumonia and whooping cough. Dr. W. F. Brunner, Health Officer of Savannah, at the Public Health meeting in Jacksonville, used Savannah as an objeet lesson in race mortality. He said that in 1913, there were in his city 39,000 whites and 42,000 negroes. Deaths from natural causes that year were:

From Natural Causes	White, 442; Colored, 1038
From Tuberculosis	White, 48; Colored, 135
From Pneumonia	White, 38; Colored, 100
From Children Under 10	White, 92; Colored, 289
From Still Births	White, 48; Colored, 230

New Orleans has a population (1910) in round numbers of 249,000 whites and 89,000 negroes. The deaths in 1914 were, white 4,356, negro 3,061. From tuberculosis of the lungs there were 481 deaths among the whites and 493 among the negroes. The relative rates are clear.

Hazen[1] in a study of 2,000 consecutive cases of skin diseases in the negro and an equal number of whites, found over three times as much secondary and tertiary syphilis, nearly six times as many gumma and over four times as much hereditary syphilis, in the negro.

In the survey made in New Orleans we had a physician-inspector whose principal duty was to gather whatever data he could relative to syphilis and gonorrhea among the negroes. He had little success; in fact, no reliable information can be had in this way. Dr. S. S. Hindman of Milledgeville, Georgia, in an article on ''Syphilis Among Insane Negroes,'' gives Doctor Terry of Jacksonville, as authority for the statement that the average death rate from venereal diseases in his city for five years (1908-1912) was six times greater among the negroes than the whites[2].

At a conference of Southern Health Officers held in April, 1914, in New Orleans, for discussion of hygienic betterment of negroes, Dr. Wm. C. Woodward, for twenty years Health Officer of the District of Columbia, gave some significant suggestions. On this point he said:

"I was troubled for a long time to find a way to determine just what the death rate of the colored people would be if compared with the white people who represent the same position that they do in the social scale. I was inclined to believe if we would take cities like New York, Boston or Chicago—and I might say, some Southern cities, too—and study there groups of white persons representing the same position in the social scale, we would probably find death rates as high as those of the colored people. In my own home, the District of Columbia, a careful study has been made. Our city is divided into what we term 'vital statistics divisions,' and death rates for white and colored are kept separately for each, so we have in the end, not merely the statistics for a large district, but also for small subdivisions of it, some representing the more wealthy some the middle class, and so on down until we come to the poorest class. The figures for these subdivisions have failed to show anything to indicate that the poorest, the most ignorant and hardest worked white laboring man has a death rate as high as the negro similarly situated. I carried that comparison to the extreme. I took the population year after year for our alleys, which compare with what is generally known as the slum districts in other cities. The white man who lives in the alleys is indeed a poor white man. And yet I found that the death rate for the whites who live in our alleys is very much lower than the negroes similarly situated. As a result, so far as my studies have permitted me to go, it seems to me that it is something more than ignorance, hard labor and poverty on the part of the colored man that is responsible for his high death rate. It arises probably, from the fact that he has not yet adapted himself to modern life, that is, to civilization of the type that prevails in this country. Where there is a relatively high death rate, we may expect a comparatively lessened span of life. The average life of the negro who died in Washington in 1913, was 34 years, 9 months and 13 days. The average life of the whites was 47 years, 9 months and 9 days. The high death rate and his relatively short life are, in my judgment, due largely to inherent racial conditions."

It may be that this hyphothesis is correct, that racial weakness, or non-adjustment to environment may be fundamental in the high mortality rate of the negro. The history of the race in its emergence from the condition of deeline of the death rate in connection with sanitary betterment, is evident. Doctor Woodward, in his work in the District, gives encouraging figures. His records show the aver-slavery is yet too brief for proof, but the age annual death rate from 1875 to 1879 for white people was 19.35, for colored 39.76. In 1913 it was, white 13.98, colored 24.84. In Mr. Harris' report, 1915, we find between 1900 and 1910 a decrease in the death rate of negroes in 38 of the 57 cities in the Registration Area. In many of these cities advance in sanitation has been notable. The decrease in malaria, typhoid fever, tuberculosis and infant mortal-

(1) Hazen, H. H.: *The Jour. A. M. A.*, Aug 8, 1914.

(2) Hindman, S. S.: *Am. Jour. Pub. Health*, March, 1915.

ity, when measures of prevention are put into operation, is unmistakable. These are the disease foes of the negro which can be controlled. With practically ten million negroes in our country, 89 per cent in the South,[3] with a knowledge that their habits, customs and home environment are prejudicial to their own health and a menace to that of the community; with evidence to prove that, among us, employed as house servants, they are factors in transmission of some forms of disease, it becomes a civic duty and a personal obligation to take thought as to what should be done.

I do not forget that a statement of facts without a constructive program of action is like an incomplete syllogism—it may be interesting but it leads nowhere. But in giving suggestions, I wish to emphasize the complexity of the situation—it is racial, socio-economic, without parallel in the world's history and with issues as intricate as any that have ever taxed human wisdom for solution. Further, incomplete data only are at hand. If it were possible to place every negro family in a sanitary home with healthful surroundings and to supply them with wholesome food, the obstacle of the negro himself would remain. Of this feature there can be no control—it is simply a matter of race evolution. He is a child, he is a thousand years behind the white man, and his growth toward a higher status can not be materially hastened.

But to the practical. The first phase is the racial. The desire of the better classes of both races is to keep the whites and blacks, racially, and therefore, socially, distinct. It goes without saying, this is the only view which the South can entertain. Yet, except with students of social progress, racial prejudice is likely to overshadow the human element. A sane scheme of betterment will be based on the assumption that the negro though, racially—the majority—undesirable, is not so wholly because he is a negro, but because the conditions under which he lives accentuates his undesirable characteristics and that the effect would be proportionately the same no matter what the race.

We accept the slowness of the Russian peasant, the cupidity of the Neapolitan beggar —we do not think of them as racial—so with some of the negro characteristics.

The economic status is another phase, a discussion of which would mean a resume of the historical development of the past fifty years. Isolation, the one crop, tenant and credit systems, are in the main the factors. Allied with this is the social-industrial condition. The world of industry, logically, has had its doors closed to him and even, as yet, there is no adjustment. Moreover, no one can forecast what would be satisfactory. Many other aspects add to the perplexity of the social-minded humanitarian economist who would recommend a program of activities.

In the health phase, there is less difficulty. It is partly financial. Proper housing and proper sanitation for those negroes unable to help themselves, and control of the shark renter, would be a long step forward. Fifty thousand dollars would be sufficient to buy a block in a city of approximately six acres, and to build thereon 80 ventilated three-room houses, with water and toilet in each. Two acres would furnish a playground and there would be money left to provide a free bath and some other necessary utilities. At $2.00 per room, per month, the income would yield a profit in dollars and cents. You are familiar with the economic loss annually to every community from sickness and death of the wage earner. I do not doubt that $100,000 expended by the City of New Orleans for improvement such as suggested above, would not only give the city a profit, but would pay otherwise in lessened illness, pauperism and crime among negroes. I hope an experiment may be made in some Southern city, that others may be convinced.

Municipal authorities and health officers should insist that the areas where negroes live be drained and sewered and that a water supply be provided. They can make obligatory certain sanitary requirements in tenant houses; they can keep streets free from dirt, filth and debris, and they can enforce the sanitation regulations. Would these measures help? Let any community interested in its own health make an experiment. Supplementary, is the control of communicable diseases. While means are not simple, much can be done. I need not go into detail on this point. You realize the results which would follow if health officers put into effect the ordinances which adorn the records of every municipality.

When we know—as we do—that people in clean homes situated on clean streets are in danger from the negro who, from poverty must live in the slums; when we know that intelligent effort to enforce the law will remove the danger, why do we not act? Partly because of a *laissez-faire* policy, partly because we have no abiding respect for the laws we make, partly because we have no health conscience, no faith in the application of the science of hygiene to conditions, no true comprehension of the danger to public health and because we think that because he is a negro he is hopeless.

There is one more point which I feel it imperative to at least suggest. There are many thoughtful citizens who resent the policy of publicity in respect to health conditions in

(3) (?) *Annals*, September, 1913; "Negro Population in the United States."

the South, and particularly anything in regard to the negro. I believe in Louisiana we have given the publicity due the public in regard to every condition, good or bad, which comes within the purview of health authorities. The wisdom of this after nearly five years of experience, is clear. It leads the individual to activity; it forces a self-respecting community to "see itself" and act in accordance; it inspires confidence in the people beyond our gates.

Conditions among the negroes are improving and the death rate is falling; if we let this be known, together with our efforts for betterment, and if we do a tenth of what is in our power to do, we shall reap the reward of increased prosperity, increased term of life, diminution of sickness and the increased respect and confidence of those who believe in the South and in its future development.

UNITED STATES GOVERNMENT MEAT INSPECTION AND HOW IT MIGHT BE SUPPLEMENTED BY STATE AND MUNICIPAL INSPECTION.*

BY

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FORT WORTH, TEXAS.

Meat inspection is very properly a subject to present before this Association, as it comprises one of the largest sanitary undertakings of our Federal Government; and, on account of its nature, the work is of primary importance to those concerned with public hygiene.

The service is so extensive and has so many ramifications that it would be impossible to cover the entire subject in a paper of suitable length; therefore, an attempt will be made to treat on only the more important phases of the work.

Since before the time of Moses the necessity of an official meat inspection has been recognized. Without going into the history of enactments by tribes, by municipalities, states and national governments, it may be said that meat inspection has more or less kept abreast of increasing knowledge; but, like other works of a scientific nature it has been more thoroughly perfected in recent years. And, in this country, it has within a comparatively short time grown from a small institution in which only a few persons were employed, and whose supervision extended to a small number of packing establishments which were doing an export business in meat, to one which has complete supervision over all establishments doing an interstate or export business. Of these there are at present about 980, located in 230 cities or towns, now employing approximately 800 veterinarians and 1,600 men skilled in the handling of live stock or meat food products.

The present law provides for an antemortem inspection of all cattle, sheep, swine or goats before they enter an official establishment; a postmortem inspection at the time of slaughter, and a reinspection of all carcasses, parts of carcasses and meat products, from time to time as they pass through the various departments of the packing plants, together with the condemnation of those which are diseased or are for any other reason unsound, unwholesome, or otherwise unfit for human food. All parts of the establishment and its premises must be maintained in a strictly clean and sanitary condition at all times.

The antemortem inspection is conducted in the alleys, pens or chutes, and the inspector carefully examines each animal. When an animal is observed which appears suspicious, it is separated from the rest and given a very close inspection, including the taking of its temperature and the recording of any abnormal conditions found. Should any disease or condition warranting condemnation be found, the animal is marked with a "Condemned Tag," and, after being killed, it is placed in a large rendering tank where it is destroyed for food purposes under the supervision of a Federal employee. Those which show a localized lesion of disease or a condition which would not warrant their condemnation without a further inspection, are tagged, "U. S. Suspect," and slaughtered separately from other animals. Should the postmortem inspection reveal more than localized lesions of disease, the carcass is condemned and accompanied by a Bureau employee to the condemned tank. If only localized lesions are found, the affected parts are condemned and the balance of the carcass permitted to pass.

The animals which show no evidence of disease on antemortem inspection, are driven into the slaughtering department; and after the neck has been severed the postmortem inspection begins. The inspector repeatedly incises and carefully examines the lymphatic glands in the cervical region, including the postpharyngeal, parotid and submaxillary lymph glands, for evidence of tuberculosis. About 93 per cent of all tuberculous cases in animals show lesions in one of these glands, either as a localized condition or in addition to lesions found elsewhere. The internal and external masseter muscles are incised and an examination made for tapeworm cysts, Cysticerci cellulosae and Cysticerci bovis, in hogs

*Presented by invitation, before the Section on State Medicine and Public Hygiene, State Medical Association of Texas, Fort Worth, May 4, 1915.

and cattle, respectively. The tongues and other portions of the heads of cattle are inspected for actinomycosis. This inspection is omitted in sheep and goats, for the reason that none of the diseases referred to are found in this class of animals.

A string of butchers now follow each other in rapid succession, each doing his part towards the dressing of the carcass until it is ready to be eviscerated. Here a veterinary inspector conducts an inspection of the internal organs and the carcass. This is accomplished by incising the heart, in order that its internal and external and cut surfaces may be examined for the presence of tapeworm cysts; the lungs, liver, spleen and mesentery are palpated, and the right and left bronchial and anterior and posterior mediastinal and portal lymphatic glands, incised primarily for the detection of tuberculosis. As this procedure directs the inspector's attention to all parts of the viscera, other existing abnormal conditions are found. After the carcass is split into halves it is again inspected. Here an examination is made of the pleura, peritoneum, cut surfaces of bone and other portions of the carcass. The regions of the superficial inguinal or supermammary, precrural, internal iliac, sublumbar, renal, prepectoral and prescapular lymphatic glands, are palpated. The inspection at this point detects such conditions as osteomyelitis, localized abscesses, bruised tissues, infected wounds, emaciation and localized tuberculosis.

It will be observed that particular attention is given to the lymphatic system, in order that the inspectors may know the condition of the various glands. This is necessary as a number of localized or systemic disturbances frequently become first evident in these organs; and, it is the means of causing the inspectors to give special attention to each organ and to the various parts of the carcass.

When diseases have been detected in the slaughtering departments, no inquiry is made to determine its extent at this point; but the carcass and its parts are tagged with serially numbered "U. S. Retained" tags and taken to an especially equipped room known as a "retaining room," where it receives its final postmortem inspection. Here veterinary inspectors, who are especially qualified and have had sufficient experience, carefully inspect all organs including the lymphatic glands and the various tissues of the carcass. It is their duty to determine the extent of the disease and the disposition to be made of the carcass and its parts. During the last year of which government statistics have been completed, 59,014,019 animals were inspected at the time of slaughter by Federal inspectors in the United States, of which 203,778 entire carcasses and 463,859 parts of carcasses were condemned.

The regulations governing the meat inspection require that:

"Butchers and others who dress or handle diseased carcasses or parts shall, before handling or dressing other carcasses or parts, cleanse their hands of grease, immerse them in a prescribed disinfectant, and rinse them in clean water. Implements used in dressing diseased carcasses shall be thoroughly cleansed in boiling water or in a prescribed disinfectant, followed by rinsing in clean water."

Carcasses and parts which are found to be affected with any disease or condition which would render their meat dangerous to public health or unfit for human food are condemned; and, together with a low grade of offal or a denaturing oil similar to kerosene, are placed in the Government condemned tank. The inspector seals this tank and sees that not less than 40 pounds of steam (280° F.) is turned into the tank and maintained a sufficient time to effectually destroy the contents for food purposes. The seals of the tank are broken only by a Federal employee, who supervises the drawing off of the grease and requires it to be prominently labeled or stenciled "Inedible." Carcasses and parts which are found to be healthy are marked, "U. S. Inspected and Passed."

There are certain conditions found where the extent of the lesions cannot be positively determined, but which appear slight; and others show but limited lesions such as a small number of cysts, in which instance the carcasses are passed for sterilization after the affected portions have been removed and condemned.

The extent of disease or the nature of a condition which would warrant the condemnation of the entire carcass, have been the subject of considerable discussion. Persons biased in judgment or unwilling to reason have criticised the Department for passing any carcass which showed disease, no matter how slight or localized. On the other hand, the live stock interests, the meat packers and the consumers opposed to the useless destruction of meats, have objected to this idea. For the purpose of arriving at a satisfactory and unbiased working basis, the Secretary of Agriculture some time ago appointed a special commission, the members of which were not in any way connected with the Department to formulate such rules and make such recommendations as would in their opinion properly safeguard the consumers of meat food products. The personnel of this commission follows: William H. Welch, Chairman, Professor of Pathology, Johns Hopkins University; L. Hektoen, Professor of Pathology, University of Chicago; Joseph Hughes, President of Chicago Veterinary College; V. A. Moore, Professor of Comparative Pathology, Cornell University; Leonard Pearson, Dean,

Veterinary Department, University of Pennsylvania; M. J. Rosenau, Director Hygienic Laboratory, United States Public Health and Marine-Hospital Service, and Ch. Wardell Stiles, Secretary, Chief, Division of Zoology, Hygienic Laboratory, United States Public Health Service.

From the Commission's report to the Secretary, which treated on this subject in detail, and which has since been closely followed, the following quotations are made:

"Illustrative of the precautions taken by the Department of Agriculture to safeguard the public health, it is the opinion of the Commission that the Bureau of Animal Industry, acting under the existing regulations, would necessarily condemn certain meats which would be allowed, either with or without restrictions, according to circumstances, upon the markets of Germany, France, England, and other countries.

"If there be any general error in the regulation, this is in favor of the public rather than in favor of the butchers and packers. Several sections (for instance, the sections on hog cholera, swine plague, actinomycosis, tuberculosis and tapeworm cysts) could be made less stringent without any danger to the health of the consumer."

Attention is invited to a very widespread popular misconception as to the significance of the word "Diseased," in connection with meat inspection. A certain proportion of the animals inspected are practically sure to be diseased, and the meat inspection system should discover, condemn and destroy them; still, the inspection should be careful and discriminating. No country is so rich that it can afford to destroy good meat. The word, "Diseased," in connection with meat inspection, has a meaning that differs from the generally accepted idea. To the popular mind the thought of eating the meat of a diseased animal is abhorrent; yet, it may be stated upon the most eminent medical authority[1] that slight infections are common to food animals, but there is no proof that they in the remotest degree depreciate the value of the meat or that the infection is transmissible to man. There may be a strictly localized tuberculosis, consisting, for instance, of an isolated tuberculous nodule in the lungs, the liver, or some other portion of the body. Such lesion would make the particular point infected "diseased" from the standpoint of meat inspection, but the carcass in general would not be "diseased," and there would be no justification in condemning it. It follows, then, that at this point the inspector in judging whether a carcass is "diseased" or not, must do so upon the general principles of pathology in its relation to the public health, and not upon any preconceived, exaggerated or sentimental idea.

The large meat firms not only slaughter and sell carcasses whole, but also cut up carcasses and prepare them in numerous ways, as curing, pickling, smoking, cooking, canning or by manufacturing them into sausage or lard. These products are subject to reinspection from time to time in the various departments in which they are prepared. The inspectors supervise the entire preparation and require absolute cleanliness. They see that no drugs or chemicals are used nor preservatives except salt, sugar, vinegar, wood smoke and saltpetre. During the year above referred to, 18,096,587 pounds of meat and products that had become spoiled or otherwise unfit for food since the original inspection, were condemned.

As a further safeguard, the Department has equipped and manned laboratories. Here, with microscope and reagents, is brought to the aid of the inspection service the best efforts of bacteriological and chemical science. Samples of the finished products are taken at random from stocks and even purchased from retailers at distant points, and taken to the laboratories for analysis. Having seen that only wholesome meat is used, and that every possible precaution is taken to have it clean, the inspectors go one step further and insist that the package is properly and honestly labeled. It is something to know that your package contains good meat. It is something also to know that you buy what you think you buy. The Department lays down the broad rule that the label shall tell what is in the package, and before a label can be used it must first be submitted and approved by the Chief of the Bureau of Animal Industry.

All the inspection for disease, both antemortem and postmortem, is done by veterinarians and their assistants. The veterinarians are graduates of recognized colleges and have been required to pass rigid civil service examinations. The assistants have also been certified by the United States Civil Service Commission. The meat inspectors, who reinspect the meat in the various departments, are men who have had long and special training in the handling of meat or meat products. No inspector is allowed to pass final judgment on carcasses or parts until he has received a complete and thorough training in the service in addition to the education and experience previously acquired. It is with this group of men that the Government has built up and maintained an inspection service so comprehensive and complete that it leaves little additional in this line to be desired.

(1) Commision of experts appointed by the Secretary of Agriculture to consider and advise concerning those portions of the Department's meat inspection regulations relating to the disposition of carcasses affected with various diseases and abnormal conditions. "Not any single animal used for food in any part of the world would, upon microscopic study, be shown to be absolutely free from all infection or lesion."

Meat forms a larger part of the food of the people of this country than is the case with any other country, except possibly Australia. Recent estimates have placed the total consumption at about fourteen billion pounds annually. It is calculated that meat constitutes about 30 per cent of our total nutritive material and costs about 30 per cent of the total.

On account of Federal inspection being limited to establishments doing an interstate business, only about one-half of our meat supply comes under this inspection, and only a small portion of the balance receives an efficient state or municipal inspection. It appears that small local slaughter houses have been accepted as a public nuisance by municipalities, and, instead of requiring that they be constructed and maintained in a sanitary condition, and that the animals slaughtered in these places receive an efficient inspection, local officials have in most instances been content to legislate them outside of the city limits. As a result, they are located in some out of the way place, away from the public eye. The offal is usually permitted to accumulate on the premises, a portion of which is devoured by hogs awaiting slaughter, and the balance left to decompose. Consequently the country slaughter house becomes the home of crows, buzzards, rats and roving domesticated carnivorous animals, and furnishes a breeding place for flies and other vermin. The water used in these places is nearly always procured from a surface well or a small stream nearby, and only in exceptional cases is it free from pollution.

If local butchers in cities and towns would concentrate their business and form one large establishment where there are now many small ones, the tendency would be to reduce the cost of slaughtering and manufacturing of meat food products; it would enable them to utilize the byproducts which they are losing at the present time, and which amounts to 15 per cent of the total value of the carcass. If operating under an efficient system of inspection the character of the local meat supply would gain in reputation and local meats could enter into competition with those supplied by the large packers. Unless there is a competition of this kind, the large packers will likely control the supply, for the American people will insist on being supplied with meat which has been carefully inspected.

Eckman's Alterative.—Eckman's Alterative is a "consumption cure" patent medicine consisting essentially of alcohol, calcium chlorid and cloves. Now the Eckman concern is running a series of advertisements in which medical writings on the use of calcium in tuberculosis are twisted into recommendations for the nostrum. (*Jour. A. M. A.*, November 7, 1914).

PREVENTIVE MEDICINE.*

BY

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The most important and far reaching subject that could claim the attention of the Section on Medicine and Diseases of Children, is Preventive Medicine. The great proposition before the medical profession today is our relation to public health. The well man, to himself, to his family, to his community and to his nation, is an asset; the sick man is a liability. This liability must be met by means from some source. There is no escape from it.

In times past, the medical profession devoted its time and skill, except on occasions of disastrous epidemics, to the treatment of disease and looking after fees. Today the conditions and relations have changed. There is a new order of affairs and purposes. Prevention is that for which we are striving. Modern science has convinced us that it is easier to prevent than it is to cure, and by far more economical. We no longer look on disease as a visitation from God for the purpose of drawing us nearer to his "Great White Throne." We now know it is the penalty for violating some of Nature's laws. We no longer believe that "Whom the Lord loveth, he chasteneth" with disease. If sickness is not the result of violating nature's laws, it is the result of ignorance of disease and the methods of avoiding it.

There was a time when the now dreaded little house fly was looked upon as a kindly scavenger. To prove that he was a scavenger, we caught him in the act of scraping the germs and filth from his legs and body, rolling it into a ball and swallowing it. What greater proof could we demand of a fly that his mission was to destroy filth and disease?

"Tristram Shandy" furnishes a pathetic and touching little story of that dear old servant, Uncle Toby, catching a fly which had been tormenting him sorely, raising the window, liberating the captive and saying: "Go forth little fly. I would not harm a hair of thy head. There is room enough in the world for thee and me." A beautiful picture of kindness, but a dangerous one as to hygiene. In localities where wisdom reigns, dead flies are paid for, so much per. "Lord has shown that in 2,000 fly spots, deposited in three days by thirty flies fed on tuberculous sputum, there must have been between six and ten million tubercle bacilli which retain their power of infection for at least fifteen days.[1]" A safe

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*Chairman's Address, Section on Medicine and Diseases of Children, State Medical Association of Texas, Fort Worth, May 6, 1915.

(1) Bandelier and Roepke: Clinical System of Tuberculosis.

proposition indeed to say, "Go little fly and sin no more!"

Before the causes of certain diseases were known, we had not the remotest idea how to prevent them. Now that we know the cause in a great many cases, prevention becomes a conscientious duty. We are no longer content to treat the sick. Our purpose and duty is to conserve public health and prevent sickness. As to how well we are succeeding, let smallpox serve as an illustration. The time was when disfigured faces were to be seen on every hand, if the victim survived to tell the story. Now smallpox is no more to be feared than measles; the anti-vaccination faddist to the contrary, notwithstanding. Today smallpox is a disgrace, because it is the result of filth and ignorance.

Preventive medicine built the Panama Canal, the most wonderful engineering feat ever accomplished. Preventive medicine has destroyed the dread of typhoid fever in our armies. It has defeated and in time will destroy, the deadly yellow fever. Since 1880 it has decreased the ravages of the Great White Plague more than 40 per cent. In the last ten years, it has made an enormous reduction in infant mortality. It has bridled diphtheria and is destroying malaria.

There is still vast room for improvement; there are broad domains yet unconquered. In the South, pellagra has become a serious question. Its cause is still unknown and therefore its rational treatment not understood. Infant mortality is still distressingly high and must be further reduced. Tuberculosis, while reduced 50 per cent, is still destroying 200,000 lives annually in the United States and costing millions of dollars each year. Let us no longer say "The Lord giveth and the Lord taketh away. Blessed be the name of the Lord." Let us meet our problems as they present themselves and let us increase our efforts to banish sickness and disease from the face of the Earth. Until then, let us consider our work unfinished. It is to remedy the life waste, the needless life waste, that every altruistic effort should be put forth.

The hope and pride of a nation is the vigor of its people. If a large number of its able bodied men and women, are unnecessarily or unavoidably cut off; if large numbers are debilitated and weakened by disease due to unsanitary conditions and preventable diseases, some power, some organizations are at fault and derelict in duty. Let us endeavor to hold the medical profession blameless for any of these preventable conditions.

Pay Your Dues Now!

THE NEED OF CONSERVATION OF VITAL ASSETS.*

BY

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FORT WORTH, TEXAS.

The subject of conservation of natural resources has occupied the attention of some of the greatest minds of our country. The waste of resources, through whatever cause, is a crime against posterity. Through conservation the greatest blessings to the greatest numbers will be attained, and the wealth of the Nation increased. The assets of the Nation are in direct proportion to the resources. If, through ignorance or greed, the farmer tills his land in such a manner as to impair its fertility, the decrease in yield results in lowering the value of the lands in that community, and consequently loss of wealth to the county.

That national vitality is one of our greatest resources, can be proven. There are many estimates as to the value of human life. Probably the best method of estimating the value of human life, is by the capitalization of earning power. Dr. William Farr has worked out such tables for England. The value at birth is the discounted value of the future earnings, estimated on the probable life, less the discounted value of the cost of rearing during the period of dependence and of maintenance when helpless through old age. In the same way, estimates are made of the value of life at any age.

In arriving at the value of human life in the United States, because of the lack of any accurate statistics Prof. Irving Fisher has estimated the average earnings of all grades, taking into account those who are idle, at $525.00 per year. Multiplying the figures in Farr's tables by the ratio between the average earnings in the United States and the earnings in England, he arrives at an estimate of the value of human life for the United States. Thus, the net worth of a person in dollars, is, at birth, $90.00; five years, $950.00; ten years, $2,000.00; twenty years, $4,000.00; thirty years, $4,100.00; fifty years, $2,900.00; etc.

Using the census figures for age distribution, he finds the average economic value of the inhabitants of the United States to be $2,900.00. I believe any lawyer who has represented defendants in damage suits, will agree that this is a most conservative estimate.

The census estimate of the population of the United States in 1915, shows 100,000,000 people; multiplying this by $2,900.00 gives $290,000,000,000.00, which represents the vital assets of the nation; certainly, any means to

*Chairman's Address, Section on State Medicine and Public Hygiene, State Medical Association of Texas, Fort Worth, May 4, 1915.

conserve this source of wealth, is worth while.

Prof. Fisher has classified the causes of death under ninety different heads. In conjunction with expert medical advice, he has worked out a percentage of preventability of the various causes of death, or rather, percentages of postponability. In determining the percentage he has taken into consideration the factors entering into the cause of the disease and the extent to which they may be eliminated or postponed. By taking the median age of death from any cause, the expectation of life of the individual at that age, and figuring the percentage of postponability, he concludes that the average economic value of the lives lost from preventable disease, which deaths might have been prevented or postponed, is $1,700.00.

It becomes a matter of interest to figure the sum that preventable disease is costing the State of Texas. At the present time it is impossible to obtain either age distribution or occupational distribution of the deaths in Texas.

The causes-of-death table used by the Texas State Board of Health, contains 191 causes; Fisher's table has 90. In applying Fisher's percentages of preventability to the Texas report of deaths for the last two years, only those deaths that clearly come under the same causes shown in his tables have been figured. From September 1st, 1912, to August 31st, 1914, there were 51,198 deaths in Texas. Of this number, using Fisher's percentages, we find that 17,928 could have been prevented or postponed. Using $1,700.00, as the average economic value of these lives lost, we find that preventable deaths cost the State of Texas $30,477,600.00 in two years, or $15,288,800.00 per year. This is an actual preventable loss in vital assets to the State. This does not include deaths due to poisoning by food and accidental poisonings, burns, conflagrations, drownings, absorption of deleterious gases, and accidents of all kinds, amounting to 2,320 deaths. It is possible that 35 per cent of these deaths could have been prevented, resulting in a saving of $1,380,-400.00.

No ratio of preventability has been figured for cancer, which caused 1,391 deaths. Surely, early diagnosis and operation would have resulted in saving many of these lives.

Preventable diseases exact an enormous yearly toll from the people of the United States. The application of the teachings of hygiene, even to a limited degree, by all the people of the nation, would result in lengthening the average age of man fifteen years. The elimination of impure milk, impure water and impure air, would accomplish much. The death rate from tuberculosis, over the civilized world, has been reduced 50 per cent since the discovery of its cause in 1882. At the present time, the average age of death from tuberculosis is 35, the beginning of man's most productive years, resulting in an economic loss to the community to that amount he or she is capable of producing; a public loss in money expended in education, and in many instances changing the economic relations by forcing wives and daughters to become bread winners.

Disease and ignorance are arch conspirators. The reduction in preventable diseases must be brought about through education of the Commonwealth. Education and more education in hygiene is necessary. The recognition by the public of the importance of minor ailments, with prevention of colds, indigestion, tonsillitis, removal of adenoids and diseased tonsils, will lessen pneumonia, rheumatism, heart disease and tuberculosis.

The deleterious effects of fatigue, whether from excessive work, long hours, poisoning from infections, impure air or overeating, are often not recognized. An universal understanding by the public, that fatigue is one of the earliest signs, if not the first symptom of tuberculous infection, is necessary.

The prevention of fatigue through recognition of its causes and intelligent co-operation by the people, will result in greater efficiency for work and pleasure, and a material lessening of the death rate. It is probably true that fatigue plays a most important part in the increase of early senility and insanity and deaths in middle life.

The annual loss in vital assets to the State of Texas, of $15,288,800.00 a year, is a matter of grave concern. Would a yearly preventable loss of this sum to the cattle industry or any other industry of the State, be tolerated by the Commonwealth?

The health activities of the State are centered in the State Board of Health and County and City Boards of Health. The enlargement of the activities of the State Board of Health, the conferring of additional powers, duties and authority, is necessary. It should provide for sanitary police, should be able to abate nuisances or anything detrimental to public health.

The Educational Department of the Board of Health should be enlarged, so that all the people may become familiar with hygiene. A Department of Research in charge of a trained Doctor of Public Health, is necessary, that the epidemiology of disease may be investigated and recognized. Power to carry out measures necessary to remove such causes, is essential. There must be a closer affiliation of State, County and City Boards of Health. Their duties will overlap and harmony and efficiency are desirable.

The State is compelled to provide for the blind, epileptics and insane. This necessity, in the case of insanity, is becoming ever greater.

The increase is so rapid that our asylums are inadequate to take care of them. As a result, mentally sick are confined in our county jails.

Many of the causes of insanity are preventable diseases. The State, by providing for a strong Board of Health, will be making an investment, in that future generations will not have to provide and maintain asylums for those who are the victims of conditions now prevailing, that can be corrected.

The physician in his advocacy of hygienic measures is placed in a false light before many people, because of ignorance. The idea of any one cutting off the sources of future business and income is contrary to accepted business principles. Consequently, it is often felt that advocacy of such reform measures by physicians is actuated by ulterior motives and not from any desire to benefit the people. As a matter of fact, the physician of the future will be a very busy person, keeping people well and curing them should they become sick.

That the application of the laws of hygiene by trained Doctors of Health will reduce the death rate, has been proven time and time again. The reduction in the death rate of Havana and the elimination of yellow fever; the sanitation of the Canal Zone, making it a safer place for habitation than the average American City, are recent results of such application.

Notwithstanding the many accomplishments of scientific medicine and its common sense application, the "National League for Medical Freedom," an organization fostered by patent medicine interests and various isms, would have the people believe that diphtheria antitoxin is worthless and that vaccination is as bad as smallpox and apt to cause tetanus. Through powerful lobbies they oppose the enactment of all sanitary measures and health legislation, maintaining that such measures are fostered by a "Doctor's Trust," to provide fat jobs for favored physicians. Opposed to any application of the principles and teachings of hygiene, they make a great parade of the constitutional rights of the individual, as opposed to the rights of the people for protection against needless disease.

We, the people of Texas, are permitting the average length of life to be shortened by fifteen years. You and every other inhabitant of this broad land, have the right to enjoy life for this additional period. Your productive years would be increased; you will make better provisions for your families, and you will be permitted to reap the pleasures of a ripe old age.

The elimination of this $15,288,800.00 waste constitutes not only a saving but an actual investment in health insurance and happiness.

VITAL STATISTICS.*

BY

W. A. DAVIS, M. D.,

Secretary, State Board of Health.

AUSTIN, TEXAS.

Statistics is essentially the science of aggregates. There can be no statistics of the individual object or unit, yet the individual object is the base or unit of statistics; all the facts concerning all the units of a certain class go into the formation of one fact, a result which is as true as the facts of the unit.

In Vital Statistics, the object or unit is the human being. Parentage, birth, environment, marriage, divorce, disease and death are the facts to be gathered, and upon such facts, compiled and classified, we may base conclusions as to the future human being, and strange as it may appear, we can tell the birth rate, death rate, marriage and divorce rate, loss from disease and length of life, for the future. So true are the deductions that men have formed societies, and upon these statistics have built big corporations and amassed enormous fortunes in life insurance. Life insurance actuaries can tell the death rate per thousand, but those working in vital statistics can go farther, and say to a surety that a given child of given parentage of given environment, will die before a certain age unless environments are changed. Life insurance companies are working with a monetary object in view, but vital statisticians look to a more noble end, the preservation and prolongation of human life.

The idea is prevalent that vital statistics has to deal only with births and deaths. This is due to the fact that earlier students have confined their work to these two subjects. These two facts are only the opening and closing of the account of life. I regret to say that in the case of 5.5 per cent of all human beings born in the United States, no other record is made. That is, in the 10 years from 1900 to 1910, in the United States, 2½ million human beings slipped into existence and out again before such an age was reached as to identify themselves, except as some mother's baby. Birth and death records are essential; but when your account is opened at the bank, it is the deposit from time to time that makes your checks good.

Marriage is another of the essential records in vital statistics. Upon marriage depends the legitimate propagation of our race. Marriage should be an entry of record, along with births and deaths.

Disease is another important element in vital statistics. We are very careful not to let a com-

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mon rooster into the pen with our pure blooded chickens, but it is frequently the case that some pure blooded innocent girl marries worse than a common man. We cannot demand physical examination as a condition of marriage, and if we could, it often happens that a man does not show a trace of his physical depravity, until later, when the results of a life of sin shows itself not only in his own body but in that of his wife or innocent child.

And I say to you physicians, that the only way you may protect your own daughters is for the State to force the physician to report all cases of venereal diseases. Until gonorrhea and syphilis are added by legislative enactment to the list of notifiable diseases and thus made items in vital statistics, nothing can be accomplished. With the postponement of syphilitic symptoms with salvarsan, health certificates as a prerequisite for marriage is a most dangerous and mischievous air castle. Once a syphilitic, always a danger; once a gonorrhea, always an infection, and while with modern tests the blood may show a negative reaction, there may sleep deep in the tissue the poison. I realize that I have taken a radical stand, but my professional life has forced me to the conclusion that so long as marriage is based alone upon selection, and that selection left to an unsophisticated, innocent girl, we need not expect any amelioration of conditions in this respect.

If every woman who enters a hospital for an operation were told the plain unvarnished truth, as to why her operation was necessary, the surgeon would not stand so well with the husband but he would not be blamed so often for a recurrence or the necessity of subsequent operations, and the family physician would be placed in a better light before the community. Syphilis and gonorrhea exist and are rampant among the best of our citizenship. Why make such a to-do over smallpox, diphtheria or tuberculosis, when these diseases outnumber them all and are the cause of more misery and suffering. Why report leprosy, when the death rate is nothing and thousands are afflicted with venereal disease in our own state.

Color, sex, nationality, occupation and social conditions, are essential facts in vital statistics. As age, occupation and social condition change from year to year, and these elements are taken from the census, it is necessary that the census be taken from time to time. If any fact is untrue in forming the aggregate, the deductions are false.

Census taking is by no means a new idea. If you will turn to Numbers 1 and 2, you will find an account of a census taken in 1400 B. C., Rameses II had a census taken. Solomon classified his people as to rank and property. The Roman censors, 444 B. C., began taking the census, and recorded 69 census in 470 years. Every Roman's birth was recorded in the Temple of Juno Lucinia; at the age of citizenship he registered at the Temple of Juvinus and his death was recorded in the Temple of Libitina. In 1501, at Augsburg, was begun the registration of births, marriages and deaths * * * In 1592, London began the registration of baptism and deaths. The later records were called the Bills of Mortality. 70 years later, Jno. Graunt began the study of vital statistics, and after 3 years came to the conclusion that there were 14 boys brought into existence to 13 girls, and that contrary to the world-wide opinion of that day there was no special fatality connected with the 7 and 9 years of life.

Halley, the astronomer, denying Graunt's statements, studied the Bills of Mortality and published a table showing the number of deaths for each year of age. These tables were used as a basis for life insurance, and there is still one company in existence that was founded at that time.

At the close of the French Revolution, no one could tell what the resources of France were. There was no published census of the population, resources, or energies, nothing upon which to base the new government. The same condition existed with us at the close of the revolution of 1776. So, in 1790, a census was taken, and it has been repeated every 10 years since then. The United States has the honor of having been the first nation to establish a periodical census. Since 1790, statistics have grown rapidly, but the branch that interests us today has been sadly neglected. Rosenau says: "The United States is exceptional among the countries of the civilized world in that there is no national system of vital statistics and no complete records of births and deaths for the country as a whole. This results from the fact that the control of registration is entirely a function of state government, or of municipal government in states where no general laws on this subject are in force."

The Federal Government has divided the United States into a Registration and Non-registration area. Those states that gather 90 per cent of the deaths are included in the Registration area; those that secure less than 90 per cent are in the Non-registration area. It is a matter of embarrassment to every public spirited citizen and a great draw-back to Public Health work, that Texas is not in the Registration area.

Since 1903, Texas has maintained a Department of Vital Statistics, but during this time we have not reached the minimum, and the United States Census Bureau does not yet recognize our statistics. County clerk's have made no reports, either allowing them to ac-

cumulate on their desks or telling physicians that they do not care to bother with them. Physicians have been so negligent that some of them never make reports of either births or deaths.

Our hospitals are the equal of any; our research work has developed the science of medicine *paru pasu* with any state; we have furnished financiers for Wall Street, jurists and statesmen for Washington, missionaries for foreign fields; engineers for the great undertakings of Europe, yet when we wish to discuss infantile mortality, we must refer to the statistics of Pennsylvania or New Jersey, or some foreign nation. When we consider the treatment of diphtheria with antitoxin, and point to the conclusion that the death rate has dropped under the serum treatment from 37 per cent to 6 per cent, we must base our deductions upon the statistics from New York or Massachusetts. Mr. Polling recently said that in travels over the United States and Europe, he had come to the conclusion that Texas is an empire in herself, possessing greater resources than any empire or state. That if you turn her over on her Eastern border, you would drown El Paso in the Atlantic, and if on the Northern boundary, you would make Canadians out of the Mexicans in Brownsville. "Yet, Texas does not keep an accurate record of the very unit that has made her great."

Birth records are of importance. With the natural modesty attending the arrival of the baby, usually the first legal recognition that is accorded him is his enrollment in the school census. This record is kept for only three years, according to law. The family bible is frequently destroyed; the physician dies; the parents are gone; the nurse is lost; and the boy reaches some point in life where his age must be established, and he is helpless. Dr. Reilley says:

"There is hardly a relation of life, from the cradle to the grave, in which the evidence furnished by an accurate registration of births may not prove to be of the greatest value, as, for example, in the matter of descent; in the relations of guardians and wards; in the disability of minors; in the administration of estates: the settlement of insurance and pensions, the requirements of foreign countries concerning residence, marriage and legacies; in marriage in our own country; in voting, and in jury and militia service; in the right to admission and practice in the profession and to many public offices; in the enforcement of laws relating to education and to child labor, as well as to various matters in the criminal code; the irresponsibility of children under 10 years of age for crime and misdemeanor; the determination of the age of consent, etc. As the country becomes more densely settled and the struggle for existence sharper, many of these matters which have hitherto been of minor significance will take on a deeper meaning and acquire greater importance."

I want to call attention to the birth certificate, classified as to importance. There are 5 major and 8 minor entries. Unless the date is given, the age cannot be established. Many legal points depend upon age limit. The compulsory education law will give the Thirty-Fourth Legislature a place in history, and the present administration with this, and many other similar measures, will stand out more prominently than all past administrations. The Child's Labor Law, although killed before it reached the hands of the Governor, will finally be passed, and the enforcement of these two most important measures will depend almost entirely upon the proper registration of births. If 10 per cent of the parents under the old law evade a correct census in order to keep their children out of school, the percentage will be greatly increased when the compulsory education law is put in force. The age of moral responsibility; the age of consent; the age of marriage; the age of franchise; the reformatory age limit; the penitentiary age limit, and the capital punishment age limit, are all dependent upon birth registration. A man must be a certain age to be a Representative, a Senator, a Governor or President.

The question of sex, the name, the place of birth and legitimacy, are all important as matters of indentity. In a count of 1,167 birth certificates filed for March of this year 57 per cent show no name; 20 per cent no place; 4 per cent no date; 17 per cent nothing as to legitimacy. This count included Galveston, San Antonio and El Paso, the only cities of Texas from which vital statistics are accepted by the United States Census Bureau. Only 11 per cent of all are complete as contemplated by law; certificates filed by Mexicans are 55 per cent correct, while those filed by Americans are only 11 per cent correct; 43 per cent have no maiden name of mother, yet upon this item frequently hangs the right of maternal inheritance. There are approximately 6,250 births a month in Texas; less than 3,000 or 50 per cent, are registered.

Joseph Ullman, who was a citizen of the United States and a wealthy furrier, was held in London as a German spy. He was given two weeks to secure his birth certificate so as to establish his American citizenship, but failed because we do not enforce our own laws. The lack of a birth certificate made it impossible for the son of an Ex-Governor of North Carolina to secure an increase in salary in the Navy, to which all native born are entitled. Dr. John M. Huntly of Indiana, left a valuable farm in care of his thriftless son for his granddaughter on her twenty-first birthday. On her twenty-first birthday, her father claimed that she was only 19. The leaf was torn out of the family bible. The court was in a quandary. A neighbor remembered that a valuable cow be-

longing to the grandfather had given birth to a calf on the girl's birthday, and he could swear to it. The grandfather had recorded the birth of the calf and so the date of the daughter's birth was established.

In Atascosa county, a Mexican boy was charged with rape, tried and sentenced to be hanged. In the trial, the mother swore that he was only 14 years old, but several Americans who were not experts on ages, swore that they believed him to be between 19 and 21. The case is now before the Supreme Court on a question of age. In the case of the State vs. Goodlake, in North Carolina, guilt or innocence depended upon whether a girl was or was not 14 years of age. No birth certificate could be found. The old Bible, the school census and the black mammy, were introduced as evidence to establish the girl's age. A physician in San Saba county, was charged with a crime, tried and sentenced to the penitentiary. A new trial was secured; at the new trial, a family bible was introduced. It showed that while it had been tampered with, the young lady was over a certain age, and the physician was cleared.

In a nation claiming to be civilized, this is a disgrace. I would not attempt to interest an audience of laymen in a discussion of vital statistics. With us, the man cares for the woman, and the woman cares for the child.

The physician who carelessly ignores birth registration is guilty of criminal carelessness as much as is the flagman who fails to place the torpedo on the rail when there is a broken bridge. And it is in the interest of the coming generation that we have asked the Mother's Congress and the Labor Organizations to champion this cause, in an effort to force physicians to obey the law. It is the baby of today, as a citizen tomorrow, who will be injured by our negligence.

The carelessness of physicians and of the local registrar, and the ignorance of parents, have conspired to render our Vital Statistics Department worthless. The record for the years from 1903 to 1910 are thrown in a small room in the basement of the capitol, along with the rubbish of many years. Until the physicians begin the registration of births, there is little use to attempt any other records. Many prominent physicians have never recorded a birth or a death. Many counties have no records whatever and certain cities that pretend to be progressive should be classed with those up the creek. Only three cities of Texas, namely, San Antonio, El Paso and Galveston, are paying sufficient attention to vital statistics to be recognized by the United States.

It is customary in making an address for the speaker to tell a joke or two. My time is too short for a joke, but I have a "joker" and wish to call attention to the following statistics, taken from the records in the Vital Statistician's office at Austin. This record is correct because the medical profession, the most honorable profession of all has made it:

TEXAS.

Population, (United States census 1910) 3,896,542. Estimated population, 4,000,000. (1915).

Year	Total Deaths	D. R. per 1000	Total Births	B. R. per 1000
1912	28,751	7.2	54,594	13.6
1913	26,141	6.5	53,612	13.4
1914	25,200	6.3	51,440	12.8
1926	——	—	——	——
1927	——	—	——	——

According to these statistics you can say to your friends in other states, that Texas is the healthiest state in the Union; that Texas is the place to live, for in 1926, going the gait we are going now, there will be no death rate and therefore no deaths.

Say to your friends in other states, who are newly married, that they need not fear to come to Texas, that in 1927, or possibly sooner, there will be no birth rate in Texas at all. The question of the limitation of families need no longer be discussed, for we have settled it already.

ABSTRACT OF DISCUSSION.

Dr. James J. Terrill, Temple, said: There is one statement made by Dr. Davis with which I want to go on record as most heartily disagreeing. I agree that gonorrhoea and syphilis should be made reportable diseases; but when he says that "Requiring a medical certificate for marriage is unwise, and dangerous," I cannot agree. I think that Texas should require of every man applying for a marriage certificate, a certificate from a reputable physician that he is free from communicable venereal disease. The great value of public health laws is in their educational effect, and such a law as this would make young men more careful about exposing themselves to such diseases.

Dr. A. L. Lincecum, Austin, said: The doctor is the potent factor in perfecting vital statistics. It is his duty, and he should do it now.

Dr. Davis, in closing said: I shall answer the last question first. Dr. Terrill wishes to go on record as favoring a medical certificate as a prerequisite to marriage. The question of constitutional rights is involved and hundreds of pages of literature have been written. I shall not discuss this subject further, but will say that the state has the right to demand a public record of the name, place and date of every disease that is a menace to public health. I introduced this question so as to elicit discussion, and I am gratified that the profession is apparently more interested in vital statistics than in the matter of a medical certificate as a pre-requisite to marriage.

As to the penalty for violation of the Sanitary Code which was discussed by Dr. Brumby; until this law is remodeled, revised and changed, so that every item on the birth or death certificate, burial or removal permit, is made an item of law, the penalty attached is of little significance. The Model Bill, as offered by the Federal Census Bureau, provides that a supplemental report naming the child may be made within thirty days after birth.

Dr. Slataper asks if the law requires the recording of birth certificates, and if so, what per cent of physicians comply with the law. He also asks whose duty it is to record the death certificate,

that of the doctor or the undertaker. These questions are answered in the Sanitary Code, except as to the number that comply with the law. I believe that there are more than 50,000 violations of this law each year.

DISINFECTION.*

BY

A. L. LINCECUM, M. D.,

Assistant State Health Officer.

AUSTIN, TEXAS.

Disinfection means the destruction of the agents causing infection. An object is said to be infected when contaminated with pathogenic micro-organisms. Destroying these organisms, whether they are in the substance or on the surface, is disinfection. Disinfection, then, deals only with destroying the vitality of those minute forms of life which cause disease. It does not mean the destruction of all the lower forms of animal and vegetable life that may be in or upon an object—that is sterilization.

For convenience of diseussion, I will divide the subject somewhat.

Primary Disinfection (which is the real and only true and dependable disinfection), begins with cleanliness in the sick room; personal cleanliness of both attendant and patients; the care of the secretions and excretions, especially those of the nose, mouth, intestinal tract, bladder, proper care of the linen, etc. Man being the point of origin or fountain-head of most infections to which he is heir, adds emphasis to the necessity of primary disinfection.

Antiseptics are substances that prevent decomposition and decay, and retard the growth and activity of micro-organisms. Formalin in 1-50000 solution will restrain the growth of bacteria. In 3-5 per cent solution it will kill in a reasonably short time. Bichloride of mercury, 1-1000, will destroy anthrax spores; carbolic acid in a 1 per cent solution will kill bacteria. These are real germicides and must not be confounded with antiseptics.

A deodorant is a substance which has the power to destroy or neutralize the unpleasant odors arising from decomposing and putrifying organic matter. Many disinfectants are deodorants, but all deodorants are by no means germicides. Nature's disinfecting agencies are few but very powerful and effective—dilution, sunlight, dryness and symbiosis; now add to this simply fresh air, soap, hot water and elbow grease and terminal disinfection will not be required.

Gaseous fumigation is an attempt to cover up our errors, in not pursuing primary disinfection, by generating gaseous substance within a sealed room. First the disinfector should know *when, where* and *what* to fumigate, and the health officer or physician who gives an untrained person a quantity of material and a few instructions as to the technique of fumigation, and passes the execution up without personal supervision, has committed a crime against the community. For under the most favorable conditions gaseous fumigation is simply a surface treatment, and if pathogenic organisms exist on the walls, or carpets, and especially should they be protected by a film of mucus, the germs will come out alive and thrifty after the fumigation is finished.

The technique of fumigation is too well known to need repeating here. Since the war in Europe began, potassium permanganate has become too expensive for use in fumigation. For that reason, Dr. Samuel G. Dixon of Harrisburg, Pennsylvania, assisted by Mr. Chas. Lawall, chemist, worked out a substitute as follows:

FORMULA FOR 1000 CUBIC FEET SPACE.

Sodium dichromate	Ounces 10
Sat. solution formaldehyde gas	Pints 1
Acid sulphuric (commercial)	Ounces 1½

Mix the acid and formalin; allow to cool (this is a stable solution). Spread the sodium dichromate in a thin layer on the bottom of a vessel having ten times the capacity of the volume of ingredients used. Having everything ready for a speedy exit, pour the solution in the vessel.

Gas fumigation as usually done, in my opinion, is a dangerous makeshift, except for insecticidal purposes, for it gives a sense of security and safety that is absolutely false and unsafe. In my opinion, gas fumigation should be done only by a trained man. The room must be absolutely sealed. The walls, ceiling and floor sprayed with water before the gas is made, will increase its efficacy. Time used should be never less than twelve hours.

We will eventually come to the universal practice of disinfecting the sick room and the patient during illness, and will finally abandon the expensive and almost useless gas fumigation as a method of preventing the spread of contagion. We will have better success if we disinfect the human carrier, and apply soap, hot water, sunshine and elbow grease, freely, as a substitute for gas fumigation.

ABSTRACT OF DISCUSSION.

DR. W. C. RUCKER, Washington, D. C., said: I disagree with the definition of disinfection as given by the essayist. Terminal disinfection consists of the attempt to destroy an agent which does not exist with an agent which would not kill it if it did exist. It is the burning of incense to an unknown God. A differentiation must be made between diseases of vegetable and animal origin. Terminal disinfection is useless as a means of controlling disease of bacterial origin. It is useful in killing animal parasites. Most of the diseases of man are peculiar to man. Therefore, the control

*Read before the Section on State Medicine and Public Hygiene, State Medical Association of Texas, Fort Worth, May 4, 1915.

of the bacterial diseases contemplate the control of human beings, particularly acute and chronic carriers; the isolation and treatment of those sick of communicable diseases, and the immunization of exposed persons.

Dr. M. E. Gilmore, Fort Worth, said: There is a curious fact about terminal disinfection, and that is that all our efforts to free houses from infection have not reduced the number of cases, the number of epidemics or the number of deaths one iota. I don't believe it does any good, and feel very strongly that it is a useless measure, and a waste of money. Authorities are agreed now that the spread of contagious diseases is due chiefly to so-called carriers, and that the disease is spread to those who come within the range of "droplet infection." The danger of infection is greater during the incubation stage, before the disease is recognized. But it is after the disease is recognized that we have heretofore taken all the precautions. The time will come when we will stop this foolishness and get down to business. We will search out the carriers and isolate them, and we will discover vaccines to immunize the susceptible. Then, and not until then, will we be able to stamp out the epidemic diseases.

Dr. B. L. Arms, Galveston, said: I would like to submit the closing paragraph of Park and Williams' new book, "Pathogenic Micro organisms," in which Dr. Park says, under "General Conclusions of Disinfection," with the sub-head "The Importance of Disinfection after Recovery or Death from Infectious Diseases," "Year by year knowledge is accumulating, which indicates that nearly all cases of the spread of infection are due to the immediate transfer from a living carrier to the person who contracted the disease. The carrier may be diseased or may simply harbor the germs. If cleanliness is maintained throughout the disease there is, as a rule, little need of disinfection after recovery."

The city of New York has given up routine fumigation following infectious disease, except in the borough of Brooklyn, where it has been continued as a control. In Boston, in 1910-1911, records of all secondary cases show that following 4,423 fumigations after diphtheria and scarlet fever, the percentage of repeat cases was practically the same throughout, although during the last half of the time, the amount of formaldehyde used was only enough to make an odor—full amount being used during the first half.

Fumigation is misleading in that it leads the public to believe that we think things carry the infection rather than persons.

Dr. Lincecum, closing said: County health officers must rigidly comply with the Sanitary Code of Texas. Disinfect the carrier of infection and isolate him, and there will be no need of terminal disinfection.

HEALTH CONSERVATION AFTER FORTY.*

BY

JOHN L. DAVIS, M. D.,

Medical Director, Amicable Life Insurance Company.

WACO, TEXAS.

Before middle age practically all sickness results from germ infection, through an influence from outside the body, as is clearly evident in the ordinary diseases of childhood, typhoid fever and consumption (both diseases of early life); but after middle age disease is due chiefly to degenerative changes within the body. In other words, before 40 disease is some accident to the human machine; after 40 it is the machine wearing out.

While the average duration of life in this country has increased in the past generation, the improvement has resulted from saving and extending the younger lives. Lives after 40 have today actually less expectancy than formerly; that is, relatively fewer old people are living today than 10 or 20 or 30 years ago. All statistics agree on this, including the experience of life insurance companies.

Several theories are advanced to explain this lessened longevity. One is that the lives nowadays saved in children and young persons, are substandard and comparatively frail lives, to which science has indeed added a few years, but having only strength and vitality enough to bring them to middle manhood or a little beyond, when the clock runs down; thus materially increasing the general mortality for this later period.

Another element which may explain at least part of this higher mortality after middle life, is the fact that a considerable proportion of our nation is made up of immigrants who have come to us from European countries where mortality is recognized as less favorable than that of our native born; for instance, Dr. Louis I. Dublin has shown that for the year ending June 30, 1914, over 23 per cent of all immigrants to this country came from Italy, 21 per cent from Russia, 11 per cent from Austria and nearly 12 per cent from Hungary—a total of 67 per cent of all immigrants. In all these four countries the mortality rates are higher than the rate in America. Hence it is reasonably assumed that this factor is an important element in adding to our mortality after 40—at least until such newcomers can be acclimatized and fairly assimilated.

In the 10 years from 1900 to 1910, deaths from degenerative diseases increased over 33 per cent; and today among life insurance companies we find among insurants past middle life, half of the death losses are due to diseases of the circulation, and kidneys, and diabetes and cancer.

These facts being recognized, what can be done to conserve health after 40 and to lengthen life? It must always be borne vividly in mind that these pathological changes are apt to start long before the individual notices anything wrong; they come on unobtrusively and frequently no alarm is felt until the impairment has become firmly established. Hence, knowing that these diseases are so common after middle life, it is the part of wisdom to provide against these changes as far as can be done by the right methods of living and by careful attention to habits, diet, exercise, etc., without even waiting for expert advice.

As we grow older we take on flesh, or rather fat, which adds nothing to our strength but is in fact a burden in most instances; and ordinarily its accumulation is worse than useless. Nor is this to be thoughtlessly charged up as a mistake made by nature; for nature makes no mistakes. In reality it is due to our own wrong methods of living. When middle age is reached we grow less active and energetic; we are less eager than formerly to move and push and crowd in life's struggle; we have acquired more poise and philosophy (not to say inertia); we begin to realize that there are some things in the world we can not do and we are willing to let the other fellow try. So our energies and ambitions flag; our muscles grow soft and flabby, because we now would rather ride than walk, rather sit than stand. So certain fatty changes in the tissues insidiously come on, which themselves add to the apathy and laziness.

With many folks as they grow older and less active, the one great pleasure in life is to cater to the stomach; and unhappy is the lot of that man who gives full play to his appetite; with excess of

*Read before the North Texas District Medical Association, Fort Worth, December 8, 1915.

rich food and diminished power of assimilation and less need of food on account of less natural waste, fat piles up rapidly. The oil globules are packed in between the minutest muscular fibrillae, and ere long their increasing pressure cuts off the nutrifying arterioles; so the tissue fibers die or rather undergo a fatty change, perhaps most significant and disastrous to the heart, but equally affecting all other organs and structures. This is the typical degenerative change of old age, beginning often as early as 40.

Dr. Eugene L. Fisk says: "With most people, the increase of weight is an index to waning physical activity, causing a physical deterioration; the average individual at the age of forty, when time alone cannot be responsible for such physical change, is indeed a pitiable contrast with the average individual of twenty-five. Already there is a sagging and drooping of the figure; there are fatty accumulations and a 'corporation' is usually a permanent and growing bodily institution." This condition shows that the intake of food is greater than the expenditure of energy; too much food or too little exercise or both.

Every active cell in the body is, as Dr. Fisk says, a little engine requiring fuel for its energy; if it lacks food it cannot perform its work, but if too much fuel or food is supplied—more than needed for its work, the surplus accumulates in the body and clogs the system, interfering with physiological action. "In fat people the number of these working cells is relatively less in proportion to the weight than in thin persons, because fat cells do no work." Growing fat, people become less active and hence the cells demand less fuel; so if the usual former diet is continued, fat must accumulate as a useless burden and menace to health. Overeating and underexercise contribute to bodily poisoning and lead to organic disease. As a matter of fact, fat cells are the drones of the hive and in one sense they are more useless than the ordinary drone, because if accumulating in excess they impede the work of the active cells. True, they store up fuel; but why should more and more fuel be stored up when the engines are already securing far more than they can use, for they are not, after middle life, usually working at full time nor at full capacity?

Overeating is the commonest failing as age advances. With our lessened activity and limited exercise and slower movements, the first thing to consider is the control of the appetite; we must naturally cut down our food. The boiler which might have been safe a few years earlier with 200 pound pressure, is now weakened and 150 pounds or even 100 pounds, is the limit of safety. It is a foolish and whimsical tendency to pile more coal on, by using more food and richer food, when the sensible and safe thing is to cut off the fuel; give the boiler less, for fear of an explosion. We all habitually eat too much and should school ourselves to a more moderate diet; this should be less and less as years increase—there is no danger of starving; on the other hand, a low diet is the best assurance of a long and healthy life.

Even without the doctor's advice the food supply can be cut down as age comes on and a select diet chosen; the great difficulty will be to carry out inflexibly our purpose to reform, which may require a policeman rather than a medical man. Usually it is a hard task, indeed, for a hungry man with a keen appetite to practice self denial; but it is absolutely essential, if he is overweight, to reduce it by diet and exercise; after middle life any weight above the recognized standard for the given age is unfavorable to longevity. As men grow older they should try to keep their weight even less than so-called standard, for these light weight old persons are the long livers. But this severe regimen we all acknowledge is nearly unattainable, and can be carried out only by the most inflexible determination, with constant recourse to some such daily litany as the frequently repeated phrase, "Fat is fatal."

But fat is not the only menace as age comes on; the heart has harder work to do with advancing years; the blood pressure increases because the arterial walls are becoming less elastic through calcareous change and at the same time thickened by the formation of connective tissue which diminishes the caliber of the vessels, and all the organs of the body, with each succeeding year, offer greater resistance to the circulation. Hence, it is extremely necessary to avoid violent or protracted exercise, which would cause irreparable damage to the heart or to a blood vessel which may easily rupture from sudden overpressure; exercise must be wisely regulated, steadily continued and never violent nor spasmodic.

A certain degree of arterio-sclerosis is natural to old age and is not pathological unless extreme or premature; but its presence demands heavier work on the part of the heart, and the blood pressure is therefore always higher at this period than in earlier life. The immediate danger from excessively high blood pressure is rupture of the weakened artery, liable to follow violent movement or unusual stimulation to the heart. Apoplexy is a familiar illustration. As age advances, then, with its weakened blood vessels and overworked heart, care should be taken to avoid augmenting these unfavorable conditions. As far as possible life should be free from influences calculated to stimulate or overstrain the heart; physical movements should be made more and more deliberate and slow; rest should be abundant, and food must be simple and light and in small quantity—better several small meals a day than one or two heavy meals. Meat and coffee, as well as alcoholics, stimulate the heart and must be used with great caution, if used at all.

Along with the changes in the heart and circulation come structural changes in all the organs of the body, with more or less impairment of function, the most vital of which pertain to the liver and kidneys. These changes to a certain extent are normal and physiological as years progress; nevertheless, as far as we can favorably modify the processes we can defer old age, so our duty is to relieve these organs as much as may be of all extra work, by proper attention to diet.

It must be remembered that autointoxication is a marked feature in senile changes; in fact, it has been advanced as the primary cause of arterial hardening. Hence the need of keeping the system flushed as fully as possible, to eliminate these poisons the baneful effects of which are directed chiefly against the kidneys and liver, though remotely impairing every organ and tissue of the body and to a greater or less degree destroying all physiological functions.

The several conditions already described apply to the physical factors of the problem. We must not forget that the mental attitude as age advances, has a vital bearing on health. Possibly the senile changes in mentality, embracing temperament, emotion, will, sensation and intellect, are more marked and of greater importance than the anatomical and strictly physical changes.

With advancing age selfishness increases, until an overwhelming interest in self dominates everything else. As the span of life is shortening the desire to live is apt to become an all absorbing thought leading to these egotistic and temperamental changes. In addition, there is sometimes the fear of leaving the family unprovided for; or of the

aged man becoming a burden to his friends or a public charge, which feelings naturally produce a moroseness and depression of spirits effectually altering the man's former disposition. As an unreasoning perverseness grows, the will and mental power decline and the emotions become ascendant. These intellectual and temperamental changes naturally complicate the problem extremely.

These changes of structure and function with growing years, whether physiological or pathological, are slow and insidious in their progress, and vitiated processes leading to disastrous results may become firmly established long before symptoms of disease are recognized by the individual. But while evidence of disease may not be observed by the patient himself, the expert physician can detect the signs usually far in advance of danger signals of pain and distress, which would warn the individual. Unfortunately, people are not inclined to consult the doctor until they feel sick or alarmed about themselves; hence these unnoted processes make deeper and deeper inroads until cure is impossible.

If men would regard the doctor as an adviser on health and right living rather than a healer of disease, they would not wait until suffering or fear demanded his help; they would consult him regularly at stated periods, for his inspection, to see that the human machine continued in good order. In fact, they ought to visit the doctor regularly, just as they call on their dentists periodically, to keep from getting sick; it is so much easier and better to prevent sickness than to cure it.

In the past two or three years health scientists and humanitarians have been urging on the public health conservation rather than the cure of disease—urging us to keep well rather than to get well. In order to know exactly where we stand—what our condition is, they suggest these periodical examinations of this human machine by experts, just as experts inspect boilers and elevators and other mechanical devices regularly to prevent a breakdown—examining them to see that they continue to be sound and safe. And especially after middle life is this greater function of the physician of most value.

The Life Extension Institute has examined thousands of working people in large industries and has found a great number of them physically impaired, though very few were conscious of anything wrong. These active workers are largely younger lives: how much more may we not expect from periodical examination of older persons? As the diseases after middle life belong especially to the arterio-vascular system, and as they are ordinarily slow and insidious in their onset, these periodic examinations are of the greatest value; for the great majority of these diseases can be detected very early by two instruments we have at hand—the sphygmomanometer and the microscope; the former in ascertaining the blood pressure and the latter particularly in urinalysis.

When on examination the blood pressure is found to be abnormal, either too high or too low, the physician will examine further to locate if possible the site of impairment. If the pressure is abnormally high for the age, there is somewhere an obstruction to the free flow of blood. Most commonly this is found to be due to a hardening of the arteries—calcareous deposits and connective tissue changes, which reduce arterial elasticity and diminish the lumen of the vessels. The next commonest cause of high blood pressure is disease of the kidneys. It must be remembered that normally the kidneys undergo an important organic change with advancing years—a progressive increase of the interstitial fibers between the pyramids; the result is, that in old age this organ is lobulated in appearance, granular and pale; the glomeruli and tubes atrophy and become hardened, and the parenchyma is compressed.

These are the progressive senile changes; they are normal, and are not accompanied by hyaline nor fatty nor colloid degeneration in the tufts and vessels; the tubules are free and clear for there is not the epithelial breaking down which obstructs the tubules in nephritis. If, then, the microscope reveals casts, we know a pathological condition is under way, and steps must be taken to prevent or delay the diseased process. And by thus discovering the very earliest deviation from normal health, the physician can save a vast amount of sickness and materially lengthen life.

Cancer and malignant growths in recent years have increased remarkably; they are diseases limited almost altogether to the latter period of life. All surgeons agree that the surest treatment is the earliest treatment; hence, in this class of diseases—alarmingly common in later life, the wisdom of periodic examinations is strikingly impressive. This pathological process may be under way months before the individual notices anything wrong, and only through a system of regular periodic examinations would the condition be noted in its incipiency.

Another disease of later life is diabetes—a condition slow and deceptive in its development, but happily for the patient the most tractable of all diseases when promptly recognized and carefully treated. While its pathology is not yet clearly understood, it is recognized as a manifestation of perverted metabolism. Fortunately, as age advances the blood acquires the power of so holding these noxious products of tissue change, that they are prevented from producing the same constitutional disturbances that result in younger persons.

These several diseases cause more than half of all deaths after middle age; they are unobtrusive in their approach and of gradual development, and their pathological processes may persist for months or years without the knowledge of the individual. But if they are recognized early, before the condition becomes deep rooted, in all cases their progress can be checked and in many instances a perfect cure is possible.

As the line between health and disease is not distinctly marked, and because a diseased condition may come on so insidiously and altogether without our being conscious of anything wrong, we should have a competent physician inspect and examine us from time to time—not waiting until sickness compels us to call him, in order that he may note the first deviation from health and at once outline the course of treatment.

It is no exaggeration to say that a majority of persons past middle life have some physical ailment or defect, of which they are not cognizant, and which could be greatly benefited by a physician's advice.

It is estimated that proper use of the knowledge we have, after middle age, would extend average longevity in this country two years or more.

Health and longevity are matters pretty largely in our own hands and there is no reason inherent in the human body that should limit our days to only three score years and ten; that limit is established simply because we do not profit by our knowledge and experience.

Pay Your Dues

SOME FACTS BEARING ON THE CAUSE OF PELLAGRA.*

BY

C. C. PARRISH, M. D.,

FORT WORTH, TEXAS.

This paper considers pellagra as an infection and concludes that the soil immediately surrounding the household is the medium for the infection.

For one hundred and fifty years the physicians and nurses in the Pellagrasorias of Italy escaped the infection, which is an outstanding fact against the suggestion that pellagra is a contagious disease. Hundreds of instances are on record where husbands live with pellagrous wives year after year and escape the disease. It is a common occurrence for one child in a family to have pellagra and continue to play, eat and even sleep with the other children without spreading the disease.

Lavinder recently wrote: "If communicable at all, pellagra certainly does not seem to be so in any very direct way from one individual to another. Evidence is not lacking, however, that pellagra is possibly a disease of place or locality."

Sambon's view regarding this question of contagiousness of pellagra are summed up by him in his denial of this possibility thus:

"(1) The narrow limitation of pellagra in certain centers, often very small, while there is free communication between their inhabitants and neighboring population;

"(2) The almost exclusive limitation of the disease to field laborers in Italy where the women share the labors of the fields;

"(3) The absolute immunity of urban population, notwithstanding frequent intercourse with numerous pellagrins from the country;

"(4) The frequent limitation of the disease to only one member of large families, living under the most unsanitary conditions, and sharing the same bed;

"(5) The absolute immunity of doctors and nurses of hospitals and asylums in which pellagrins are admitted;

"(6) The non-transmission of the disease from wet-nurse to child by means of lactation;

"(7) The failure of all attempts to reproduce the disease by means of inoculation of the ichorous matter from the skin lesions of the blood and saliva of pellagrins made by Gherardini (1780), Buniva (1805), De Rolandis (1824), and others."

In six districts investigated by the Thompson-McFadden Pellagra Commission, four of which had no sanitary sewer connections but in which there were several cases of pellagra, which had originated in these four districts, while two that had sanitary sewer connections but had no cases of pellagra that had originated in these two districts, suggest that the feces may be a source of infection. We know that typhoid fever, hookworm disease, tapeworm and many other diseases, are carried to the soil through the excreta of human beings and later gain admission into the intestinal tracts of other humans.

We know that in the rural districts where vegetables, milk, eggs, poultry, beans, meats and other foods are produced, we have a greater proportion of the population suffering with pellagra than in our large cities where such articles of diet are not cultivated. The larger the city, the fewer infected in proportion to the population.

In our very large cities, where the streets are paved for miles; where the housewives obtain their vegetables from market places; where even the humblest classes have sanitary sewer connection; where the cultivation of the soil is mostly confined to flower pots, and the diet of the people ranges in quality and quantity from a bare sustenance of life on the one hand to the upper classes on the other, where riotous living and gouty diatheses are common, here we find little or no pellagra. In the rural districts the vast majority are exposed to the soil of the premises and especially the adult women who bear the burden of preparing the vegetables for the table, while the men are up and off to the fields at day-break, to return at noon for only an hour and, perhaps, not until dark.

We know that twenty-two times as many women as men between the ages of twenty and forty have pellagra; and when we try to account for the great difference in morbidity between the sexes in adults, our explanations fall short as to children under ten years and adults past sixty.

I have a record of twenty-six women patients suffering with pellagra, who also had daughters with the disease. In only one instance did the husband of any of these women have pellagra and he was a farmer (mentioned in the second family report below).

A grandmother suffering with pellagra had lived with a family the year before, and had used a privy located in the highest elevated corner of the garden. The next year the only three members of that family of seven that worked in that garden contracted the disease. The father was away from home all day, the oldest sister was in school in a distant town and the two youngest children were too small to be of any assistance, and they all escaped, while the mother and the only two children who subsequently worked in this garden contracted the disease.

In a family where the grandfather died the year before from pellagra, the last six months being confined to his bed, I noted that the excreta of the patient had been thrown over in the weeds of an adjacent lot. The next spring the adjacent lot was turned into a garden, and the following summer of the same year, all of the members of that family contracted pellagra simultaneously, except the baby who was too young to work in the garden.

We know that there has been no pellagra reported from the Army, Navy or any ocean-going vessel.

In Italy there is a river that divides the fertile valleys from the foothills of a mountain range. On the mountain side of this river there has never been any pellagra, although the valley has not been free from the disease for a hundred years. The people moving from the valley across the river to the mountain side never take the disease, but the people who move from the mountain side to the valley often do. Referring to this situation, Sambon says: "Both physicians and peasants told me of pellagrins whose elder children, born in a pellagrous district, were also pellagrins, while the youngest, born after the removal to a healthy locality, were entirely free from the disease. On the other hand, it has frequently happened that a family of five or more healthy children born in a pellagra-free district acquired the disease all at the same time on taking up residence in a pellagrous locality. One family, in which there were five healthy children, simultaneously contracted pellagra on removing to an infected district. Another well attested fact is that children sometimes become pellagrous first, their parents afterward. Thus two sons contracted the disease in a neighboring province several years before their father, for the reason that they both went to work in an indemic locality several years before their father."

Eighty-five per cent of the cases of pellagra investigated by the Thompson-McFadden commission were found to have developed in a house previously occupied by a pellagrin, and less than ten per cent

*Read before the North Texas Medical Association, Fort Worth, December 8, 1915.

were found further away than the second door to a house previously occupied by a pellagrin.

These facts suggest that whatever is the medium for the spread of pellagra, it is stationary and constant; also, that it is something that women are more exposed to than men, that children and the aged are exposed to in equal numbers, and a medium that is more active in the spring, summer and fall than in winter. As stated in the beginning, my conclusion is, that the soil is the medium.

FURTHER OBSERVATIONS ON HEISRATH-KUHNT OPERATIONS.*

BY

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At the last meeting of this Association I presented a paper on the surgical treatment of trachoma, in which I strongly advised operation before the sight was materially impaired from corneal ulceration, and presented some case reports along that line. In this paper the opinion was advanced that the Heisrath-Kuhnt operation for the prevention of corneal ulcers and the cure of chronic trachoma, was the only surgical procedure the technique and purpose of which are based upon correct principles.

As an objection to this operation it was claimed that in some cases a small pucker in the center of the lid remained while in others the fornix conjunctivae contained small bridles or bands. Occasionally these complications take place, but I do not consider them serious. However, it is the purpose of this paper to present some slight modifications in the technique of this operation which I believe if adhered to, will prevent in almost every instance the complications mentioned, together with a report of a few cases, with photos to show the limited amount of deformity resulting. The continued observation of the cases reported, together with an extensive list of the same operation since that time, enables me to draw some conclusions which, to my mind, indicate this to be perhaps the only operation which will prevent recurrent corneal ulcers in trachoma. In no case have we seen an ulcer appear after the eye has recovered from the operation, unless the cornea is so diseased as to materially reduce its resistance.

I am more thoroughly convinced than ever that the proper time for this operation is the earliest possible moment the consent of the patient can be secured after the tarsal cartilage becomes involved and before the cornea has materially suffered from ulceration.

The modifications to which we referred are, first, the cut through the tarsal cartilage; second, the method of dissecting up the conjunctiva, and third, the sutures. (Fig. 1).

*Read before the Section on Ophthalmology, Otology, Rhinology and Laryngology, State Medical Association of Texas, Fort Worth, May 5, 1915.

First: The original cut through the cartilage extends from one canthus to the other, about three thirty-seconds (3/32) of an inch from the margin of the lid. The cut advised extends through the cartilage from one canthus to the other, but is not the same distance from the margin of the lid throughout its entire length. In the center of the lid, for about three sixteenths (3/16) of an inch, the distance from the margin is increased about half its width. The best plan of making this incision is to evert the lid by applying forceps in the center, corresponding to the exact point at which the incision starts. With a round pointed knife just missing the end of the forceps, a cut is made through the cartilage about three sixteenths (3/16) of an inch in length. With a pair of small scissors this cut is extended on either side toward the margin of the lid, on an

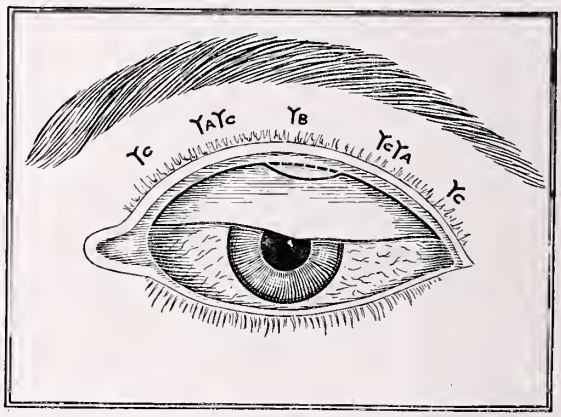


Fig. 1. Dotted line shows the original incision; curved line, the modified incision. A-B-A, original sutures; C-C-B-C-C, modified sutures.

angle of forty-five (45) degrees, until the line three thirty-seconds (3/32) of an inch from the margin is reached, which line is followed until the entire cartilage is divided, as shown by the drawing. The object of this reinforced center is to prevent the little puckering to which reference has been made and which usually occurs, if at all, at this point.

Second: The original plan of dissecting up the conjunctiva is to make a cut through it, corresponding to the upper border of the tarsus, and with forceps, knife or scissors separate it from the tissues beneath, well on to the globe. The modification is to grasp the margin of the tarsus at the center of incision and with a round pointed sharp knife separate it from the adjacent muscular and cellular tissues. This dissection is continued beyond the upper margin of the tarsus, through the fornix and well on to the globe. When this is completed the fornix margin of the tarsus is located near its center, and with a sharp pointed knife a small cut through the conjunctiva is made. With a small pair of scissors, curved on the flat, pass one blade through this little cut and

follow the border of the cartilage on either side until the conjunctiva is severed, liberating the tarsus. This not only gives a smooth edge for approximation but it includes all of the conjunctiva and some of the sub-conjunctival tissue, which is much less liable to form bands or bridles as it unites.

Third: The original plan of suturing the conjunctiva to the under surface of the lid

Fig. 2. Resisted all treatment, including jequirity, for years. Eyes look much less deformed than before operation. (Case No. 1).

along the cut through the cartilage, was with three sutures, one in the center and one midway between either canthus and the center. The modification is to use five sutures instead of three, introduced in the same manner, only the lateral spaces are divided equally by two sutures. There can be only one objection to using five instead of three sutures, namely, the time required for their insertion. The advantage of five sutures over three is, first, more perfect approximation; second, more perfect union; third, less liability of bands of adhesion, and fourth, almost an absolute guarantee against the appearance of granulation tissue in the line of incision, which, according to my observation, is the only reason why these patients should not return to their homes on the fifth or sixth day following the operation. This means a great saving of time and money to the patient, items which the physician should not overlook.

The following brief reports are respectfully submitted:

Case No. 1.—Mr. L. F. A., white, adult. About eighteen months after the operation the following questions and answers were recorded:

(1) When did your eye trouble first begin? Ans.: 1901.

Fig. 3. Had been troubled for 30 years. Practically blind for half that time. Now attends to his business. (Case No. 2).

(2) What treatment did you have before operation? Ans.: Don't know the names of treatments, but had different treatments from different doctors.

Fig. 4. Two good eyes and no deformity. (Case No. 3).

(3) Did you have much pain or dread of light? Ans.: Yes.

(4) How many attacks did you suffer? Ans.: Almost constantly. Improved during 1906.

(5) Have you had such attacks since operation? Ans.: No.

(6) Did you have much pain or swelling after operation? Ans.: No.

(7) How often and how severe has the pain been since operation? Ans.: No pain.

(8) Was your sight much affected before operation? Ans.: Yes; had to be led about.

Fig. 5. These eyes look natural. (Case No. 4).

(9) Has your vision improved since operation? Ans.: Yes, greatly.

(10) What is the condition of your eyes at present? Ans.: Getting stronger. Can see to attend to business.

(11) Based upon your experience, would you advise others to have the same operation? Ans.: I would.

This patient was under our care at intervals for four years, during which time almost all known remedies for trachoma, from the mildest astringent to an aqueous solution of jequerty, were used. Ulcer after ulcer of the cornea, causing the most terrific pain and destruction of sight, were the constant companions of this unfortunate man, until he was almost ready to end his existence by taking his own life. On February 8th, 1913, a double Heisrath-Kuhnt on both upper lids was performed. His improvement began from that time. The photograph was taken in May, 1914. (Fig. 2).

Case No. 2.—Mr. S. M. S., white, adult. About a year after the operation he answered the following questions, as indicated:

(1) When did your eye trouble begin? Ans.: About the year 1880.

(2) What treatment did you have before you came to us? Ans.: Treated almost constantly from 1895 to 1911.

(3) Did you ever have much pain and dread of light before operation? Ans.: Constant dread of light. So many attacks I can't remember. Pain during attacks of ulceration only.

(4) Have you had such attacks since operation? How often and how severe? Ans.: Not any.

(5) Was you vision much affected before operation? Has it improved since? Ans.: Was practically blind. Can now read and write and transact daily business.

(6) How are your eyes now? Ans.: Practically well.

This man was visited at his apartment on the 26th of May, 1913. He was in a dark room suffering the most violent pain in both eyes. He was treated until July 15th, 1913, on which day a Heisrath-Kuhnt operation was performed. From that time on his improvement has been continuous. The photographs were taken in December, 1914. (Fig. 3).

Case No. 3.—Mrs. J. K., Mount Hope, Kansas. This lady was operated upon in July, 1913. Prior to this time she had made three visits from Kansas to Fort Worth, for treatment of corneal ulcers due to tra-

Fig. 6. Only one eye operated upon. (Case No. 6).

choma. These trips were necessarily expensive, to say nothing of the loss of vision and pain. She writes that she has not had any trouble since the operation and her vision is improving all the time. The photograph was made in January, 1915. (Fig. 4).

Case No. 4.—Mrs. A. L. A. For more than two years prior to 1913 this lady had recurrent attacks of corneal ulcers. These attacks often came on suddenly and were very violent. She said she frequently went shopping, with no thought of trouble,

and within a few hours an attack would come on, which would prevent her going home alone. She was very nervous and when approached upon the subject of an operation said she could not possibly have it done under local anesthesia, and that ether or chloroform made her deathly sick. Dr. Chas. H. Harris suggested giving her ether through the venous system. This she assented to, and was operated on January 2d, 1914. Practically no nausea followed. She has not had a corneal ulcer since. The photograph was made in February of this year. (Fig. 5).

Case No. 5.—Miss R. W. of Eastland, Texas. Age 23. For six years has had trachoma with recurrent corneal ulcers of the right eye. Vision when first seen, right eye 20/200, left 20/20. This patient had been repeatedly treated, with temporary benefit. Her mother being a practical woman and a widow of a physician, realized the importance of permanent relief. On November 25th, 1914, the right upper lid was operated upon. Very little reaction recurred. On December 18th, 1914, the vision had gone up to 20/70. The photo was taken three months after operation. (Fig. 6).

ABSTRACT OF DISCUSSION.

Dr. J. H. Foster, Houston, said: I have had only two cases in which I have done this operation, but have had good results in both cases. I have not kept up with the operation, but it appears to me to be the rational treatment for certain types of trachoma.

Dr. J. H. Burleson, San Antonio, said: These cases should have the advantage of every possible chance for a cure. I would like to ask Dr. Thompson to state the amount of entropium in these cases, and if it is benefited?

Dr. J. M. Woodson, Temple, said: I enjoyed the paper, and I think Dr. Thompson has more information on the subject than anyone in this State. I would like to ask Dr. Thompson if he made the pathological findings in each case before operating and after operating?

Dr. H. T. Aynesworth, Waco, said: I think Dr. Thompson is authority on this operation. I would like for him to mention especially the position of the incisions. I think the incision can be varied with advantage in certain cases. In one case that I operated upon I left only a fractional part of tarsal cartilage *in situ*, with apparent advantage. I believe it would be wise to dissect the granulations out of the fornix.

Dr. Thompson, closing, said: The Heisrath-Kuhnt operation is good for entropium. Answering Dr. Woodson, as to the pathological examination, I think the appearance of the eyelids sufficient. I think there is no greater danger in the Heisrath-Kuhnt operation than there is in a canthotomy. I pay but little attention to the secretions. It is advisable not to do this operation if there is an active corneal ulcer. Answering Dr. Aynesworth, as to the incision, I go close enough to the margin of the lid to get all of the diseased cartilage. I do not operate upon acute trachoma, but in the chronic cases where the lids are thick this is, to my mind, the most successful treatment. It is not necessary to remove the granules from the fornix, as they will disappear.

Use of Paraffin Oil.—While it is recognized that cancer may be caused by chronic irritation, the paraffin oil used medicinally is bland and non-irritating and there is no reason to suppose that its continued use would cause cancer. A good quality of oil may be obtained by prescribing *Paraffinum Liquidum* or *Petrolatum Liquidum Grave*. (*Jour. A. M. A.*, October 17, 1914).

DEPARTMENT OF EXTENSION

[It is believed that the following article on grip will be of service to convalescents, not only because of the prevention of relapses, but also because it will tend to dispel the gloom which darkens the convalescence of the disease. The little article on whooping cough will teach the public how important it is that children under five should be protected against whooping cough. These articles are written especially for the laity. Any physician desiring reprints for his patients may get them at a reasonable charge to cover the cost of printing, etc.]

SIMPLE RULES FOR THE CARE OF INFLUENZA PATIENTS, AND FOR THE PREVENTION OF INFLUENZA OR GRIP.

The person suffering from influenza or grip, should first of all be kept in a well ventilated room of even temperature. A little sunshine in the room helps to cheer the patient. The food should be served as neatly and in as attarctive a form as possible. The actual articles of diet allowed must be ascertained from the physician. A little cheerful company is usually helpful if the patient is not too sick, but gloomy subjects should not be discussed. When the patient first sits up, the room should be warm (about 70 F°), and plenty of wraps should be provided. There should be fresh air, but a draft of cold air might bring on unpleasant reaction.

Grip often, though not always, occurs in epidemics. Prudence demands that reasonable precautions be taken to prevent the spread of the disease from the sick to the well. The ordinary common sense rules for the sick room should be enforced. Children should be kept out of the room which harbors an influenza patient, and adults should avoid inhaling the dust from such a room. Delicate persons and those susceptible to cold and grip, should avoid contact with the sick. The eating utensils of the grip patient should be scalded separately from those of the other members of the household. Some dustless method of cleansing the floor and furniture should be used.

It is universally agreed that exposure to damp, cold weather is often the immediate cause of grip. When the skin is moist, a cold draft is much more harmful than at other times. Fatigue increases susceptibility to grip. The wearing of damp shoes and stockings may be followed by grip or some kindred disorder. The change from the heated atmosphere of a train to the cool air outside, may induce an attack of grip. In general, breathing cold or damp air is less harmful than allowing such air to come for a time into contact with the skin, especially when the skin is moist.

Probably no disease causes greater depression of spirits than grip; all convalescents from this disease should bear in mind that they are not and have not been nearly so sick as their feeling would indicate. The "blues" may be expected as part of the aftermath of most cases of grip. Sunshine, good food and patience, in conjunction with the attention of a cheerful and sympathetic physician, soon drives the blues away.

The only compensation for the wretched sensation which accompanies and follows grip is the fact that this sensation induces the patient to take all precautions against a recurrence of the disease, and against the complications which sometimes arise. Exceptional cases of grip, especially when neglected, may develop undesirable complications, which need not be mentioned here. Suffice it to say, that the grip patient should not only keep in touch with

his physician during the height of the attack, but should report to him for a final inspection, to make sure that there are no annoying sequels.

Many delicate persons show a tendency to repeated attacks of grip. Such persons should make a systematic attempt to increase their resistance toward cold, while at the same time avoiding excessive exposure. Tepid or cool sponge baths are sometimes of value. Outdoor exercise in good weather is nearly always available. The methods of "hardening" or increasing the resistance should be discussed with the family physician so that the measures used will be in proper adjustment to the patient's constitution. Many persons ultimately become able to resist all exposure to which their surroundings subject them.

SIMPLE RULES FOR THE PREVENTION OF WHOOPING COUGH.

Whooping cough is caused by a certain species of germ which lives and multiplies in the delicate lining of the windpipe and bronchial tubes. The germs not only increase the formation of mucus or phlegm, but also renders the air passages less able to throw off or eject such material. The cough is merely the body's effort to get rid of the germs and the excess of mucus.

For some obscure reason, the public tends to regard whooping cough with a certain levity, as though it were in some degree a joke. Even those who regard it seriously often fail to realize its grave danger. Infants with whooping cough show a higher mortality than adults with either penumonia, smallpox, typhoid fever or yellow fever. A reliable authority states that out of every hundred nurslings sick of whooping cough, forty die. If the age limit is raised to two years, out of the hundred, only twenty-five die. Whooping cough rarely causes the death of a child above 5 years of age. The death record of a certain European city showed that during forty years, whooping cough had killed more people than any other quarantinable disease.

Children suffering from whooping cough can communicate it to others from the time it makes its appearance until recovery is complete. It seems likely that danger of contagion lasts for a while after the cough has entirely disappeared. In order to catch the disease, a child must usually come in personal contact with a person suffering from whooping cough. It is probable that the secretions and discharges from the nose and mouth are the medium by which the germs are spread from one person to another. It is possible that toys or clothing might be soiled with discharges and thus convey the contagion, but such instances are rare. The time intervening between exposure and the development of the disease, is usually less than 16 days.

In order to guard against whooping cough, young children should be kept away from crowds, and should not be exposed to personal contact with any except known healthy persons. During an epidemic, great care should be exercised towards babies.

A parent whose child contracts whooping cough should either keep the child at home, or allow liberty under careful precautions. If a child does not touch or play with other children, he can go on the street without endangering them. Coughing towards other children, exchanging toys with them, or coming in close contact with them should be forbidden.

A vaccine against whooping cough has been used by some, but the physician in charge of the case should be left free to use it or not as he sees fit. It is particularly advisable to give the best of care to whooping cough patients under two years of age. The general strength of these little patients must be carefully saved. The treatment should be along systematic lines, carefully followed out, with a view to saving the patient's strength.

"PATENT MEDICINES."

Torald Sollmann, Cleveland (*Journal A. M. A.* December 25, 1915), criticizes the report of the commission on proprietary medicines of the American Pharmaceutical Association, published in the October number of its journal. This awakening of the drug trade to the "patent medicine" evil, he says, is a most welcome accession to the forces that are working for the protection of the people. The drug trade should not be blamed unduly for the part it has taken in the "patent medicine" business. Many of the evils arose insidiously and were practiced thoughtlessly. If its attitude is fairly reflected in the report, it is wisely choosing its path, though its provisional rules adopted as minimum requirements for proprietary remedies, while in the right direction, only touch the evil superficially and promise a palliation, not a cure. Sollmann first answers some of the statements as to the weakness of the arguments against "patent medicines" and then takes up the provisional rules in detail. Some of these can be indorsed as they stand, that is, they are good as far as they go. The third rule against the undue use of alcohol does not go far enough to protect the public. There is but one way of doing away with alcohol in "patent medicines" and that is to prohibit absolutely its sale to the public in this form. The same applies to the rule in regard to habit-forming drugs, and the provision against dangerous doses should receive an important addition, namely, that all preparations which may occasion harmful effects even when used improperly must be plainly and conspicuously labeled "poison." Some other rules are going to be difficult of enforcement unless more complete supervision is exercised and a more positive liability for damages is encouraged. The real spring of the "patent medicine" evil is in the secrecy, the secret formula. There are at present three plans of dealing with this formula question, first, to permit the manufacturer to keep the ingredients secret except for certain specifically stated causes; second, the confidential registration of the formula with some government commission, and third, the publication of the formula on the label. The objection to this last has its weakness and if the manufacturers are really serious in desiring protection against imitation they could obtain it by patenting their formula, provided it is really original and meritorious. The publication of the formula might really be of some help to the honestly intentioned manufacturer, as the physician would have no very strong reason for objecting to its use by the patient providing he knew that it was suitable for the case or could do no harm, but with the composition secret he can only honestly prohibit its use. The second argument in defense of the secrecy is that the publication of the formula could do no good to the buyer, as he would not understand it anyhow. This underestimates the intelligence of the public. It is suggestive in this connection that several state laws require the publication of stock formulas. It can be scarcely contended that the farmer knows something about what drugs are given to his stock, but can not understand what he is to take himself. The publication of the formula will also be of service to the public by protecting it against a change of formula whenever the price of ingredients or other reasons would lead the manufacturer to make it, and a final argument against secrecy, and in Sollmann's mind, the most important is the protection of the public against drugs which may under some circumstances be perfectly harmless but under others very dangerous; for example, the

bad results to the patient of his applying calomel to the eye without the knowledge of the physician when he is taking iodid, a very frequent constituent of patent medicines. The claim made that the formula is the property of the manufacturer who has a right to do what he pleases with it, would open the way to any kind of fraud, and it is the duty of the state to protect the public against this. The proposal to register the formula confidentially with a government body is offered as sort of middle ground supposed to guard the interest of the manufacturer and protect also the public. As a matter of fact, it can do neither satisfactorily. The advantage to the manufacturer would be nullified by any leakage of the information, which would be almost inevitable, and it would not protect the consumer against possible injury from dangerous drugs, harmful for him individually, a very common possibility. Sollmann says that a question is never settled until it is settled right, and any settlement satisfactory to neither party is not a settlement at all.

"KIDNEY CURES" SEIZED.

Action against several so-called "kidney cures" has recently been taken under the Food and Drugs Act by the United States Department of Agriculture. In one case the shippers of a preparation labeled as "A Sure Cure For Bladder and Kidney Trouble" were prosecuted on the charge of falsely and fraudulently misbranding the product. They pleaded guilty and were fined $25 and costs by the court. This particular kidney "cure" was found to contain over 41 per cent of alcohol. It was labeled "Old Jim Fields Phosphate Dill and Gin Mankind's Greatest Friend A Sure Cure For Bladder and Kidney Trouble. It is also a Great Aid in Case of Urinary Trouble. Allenberg & Meister Sole Agents, Memphis, Tenn." An analysis of the product showed that it contained no material amount of either dill or phosphate.

In another case 48 bottles of "Stuart's Buchu and Juniper Compound," prepared by the Stuart Manufacturing Company, Atlanta, Georgia, were seized. The court issued a decree of condemnation, forfeiture, and destruction on the ground that the claims upon the label were misleading, false and fraudulent. On this label the manufacturers recommended their product as a remedy for a great variety of kidney and bladder diseases and stated that the medicine contained 16 per cent of alcohol.

According to the medical experts of the Department, alcohol is a kidney irritant and is dangerous in many cases of kidney disease. For this reason many physicians advise their patients who suffer from any kind of kidney or bladder trouble to abstain from the use of alcohol even in moderate quantities. Some manufacturers of kidney medicines which contain considerable quantities of alcohol also advise their customers to abstain from all alcoholic drinks, showing in this way that they know the harmfulness of alcohol in kidney diseases, even though they use it in their own preparations. It is the opinion of the medical experts of the Department that such so-called "kidney remedies" as those recently seized are not only worthless but actually harmful, because of the amount of alcohol which they contain.

MODERATELY HONEST ADVERTISING.

We noted in an exchange this week an editorial article stating that the editor had turned down a big advertisement from a quack doctor and were just reaching for our typewriter to write a commendatory paragraph when we noticed, in another column, a cancer "cure" advertisement. Another of our exchanges recently threw bouquets at itself because it refused to take a patent medicine contract; but in the same issue carried a page ad from a fake "specialist." Any man with the intelligence and information needed to edit and manage a paper should know that there is no cure for cancer and that reputable physicians do not advertise. Every man who is honest and deserving of the confidence of his readers and honorable advertisers will, of course, refuse all advertising that is in the least questionable, and he will be particularly alert regarding medicines and doctors. Just why anyone should attempt to take credit for being thus moderately honest is difficult to understand unless one is acquainted with the fact that a large percentage of papers, otherwise respectable, fall for these fakers. Fancy a decent citizen parading his virtue because of his refusal to aid a gang of yeggs in looting a bank, for six per cent of the swag? Yet the yeggs might be high-minded gentlemen compared with the disgusting sneak-thieves who not only rob the sick by taking advantage of their misfortune, but, usually, add to their crime the atrocity of either increasing the pain or hastening the death of their victims. Sick people, especially those suffering from incurable maladies, are like drowning people, prone to grasp at straws; even against their better judgment, hence are an easy prey for these unnatural fiends, and the newspaper man who assists them for a paltry percentage of their ill-gotten gain, is particularly blameworthy, because he betrays the confidence of his readers.—*The Estelline (Texas) News.*

THE FACTOR OF POVERTY IN SANITATION.

The factor of poverty in sanitary problems was discussed in Washington, November 26, by Surgeon General William C. Gorgas, whose success in cleaning up Havana and the Panama canal zone has brought him recognition as America's leading sanitarian. His audience was the Clinical Society of Surgeons, assembled in their twenty-fourth annual meeting. Dr. Gorgas said, in part:

"Such sanitary work as is necessary in the tropics is inexpensive, but measures directed against special disease are not the greatest good that can be accomplished by sanitation.

"Before these great results that we can all now see are possible for the sanitarian, we shall have to alleviate more or less the poverty at present existing in all civilized communities. Poverty is the greatest of all breeders of disease and the stone-wall against which every sanitarian must finally impinge.

"During the last ten years of my sanitary work I have thought much on this subject. Of what practical measure could the modern sanitarian avail himself to alleviate the poverty of that class of our population which most needs sanitation? It is evident that this poverty is principally due to low wages; that low wages in modern communities are principally due to the fact that there are many more men competing for work than there are jobs to divide among these men. To alleviate this poverty two methods are possible, either a measure directed toward decreasing the number of men competing for jobs, or, on the other hand measures directed toward increasing the number of jobs.

"The modern sanitarian can very easily decrease the number of men competing for jobs; if by next summer he should introduce infected stegomyia mosquitoes at a dozen different places in the southern United States he could practically guarantee that when winter came we would have several million less persons competing for jobs in the United States than we have at present. This has been the method that man has been subject to for the last six or seven thousand years, but it does not appeal to me, nor, I believe, to yourselves. This

method is at present being tried on a huge scale by means of the great war in Europe. I do not think that I risk much in predicting that, when this war is over and we shall have eliminated three or four million of the most vigorous workers in Europe, wages will rise and for a long time no man will be unable anywhere in Europe to get a job at pretty fair wages.

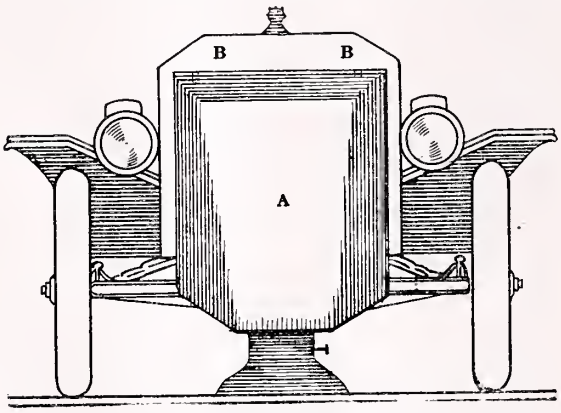
"But I am sure that every sanitarian would much rather adopt measures looking toward the increase of jobs rather than, as we have done in the past, submit to measures that decrease the number of competitors for jobs.

MISCELLANEOUS

A SIMPLE RADIATOR AND GARAGE WARMER.

Dear Doctor: Since the cold weather set in I have been trying out in my own garage a simple little device, which I find so satisfactory that it has occurred to me that others might be interested. The enclosed drawing and the following descriptive matter, will serve fairly well to convey my idea.

Have a piece of sheet iron cut so as to form a hood or apron, as wide as the radiator and long enough to reach from the top of the radiator proper to a point near the floor and sufficiently elevated to just embrace the lamp portion of a coal oil heater, such as may be decided upon. The sheet iron should be made to fit the radiator snugly at the top and be so bent as to form a half circle at



RADIATOR AND GARAGE WARMER.

The sheet iron apron is represented by "A," and the brackets for holding it snugly to the radiator at the top by "B." The stove is shown below the apron.

the bottom, where it embraces the stove. For the purpose of attaching the hood to the radiator, and in order to hold it steady, two braces of sheet iron should be bradded to the hood at the top so they will project into the radiator just below the top reservoir. The sheet iron apron is designated as "A," and the two braces as "B," in the accompanying drawing.

Any good coal oil heater will do, but some of them are not good, and I have been using the "New Perfection," which has given me good service. It may be urged that the coal oil heater is dangerous, and that most of them will, at the most unexpected time, begin to smoke and fill the surrounding space and surfaces with soot. In order to meet this contingency, I have placed the heater I use in a pan of water, and I have found that a very small flame will meet all requirements; the lower the flame the less likely it is that the stove will smoke. I have also resorted to the expediency of suspending an ordinary fire cracker above the stove so that should the flames get too high the consequent explosion will give me due warning. I hope this is no infringement on the small boy.

I find that this simple device will keep the water in my radiator warm for twelve hours on about 6 cents, and it is a joy to be able to step into a warm garage and crank a car without the usual cold engine difficulties. Even where there is a self starter, the device in question will doubtless prove a saving in wear and tear on machinery and in the use of electricity.

The device costs about $6.00, and it is not patented. Any tinner can make the apron from this description, I am sure.

Fraternally yours,
C. L. McClellan, M. D.

Farwell, Texas, December 2, 1915.

QUESTIONS ASKED AT THE EXAMINATION HELD BY THE TEXAS STATE BOARD OF MEDICAL EXAMINERS AT DALLAS, NOVEMBER 9, 10 AND 11, 1915.

ANATOMY.

(1) Give the difference between the male and female pelvis. (2) Describe fully the shoulder joint and name the important muscles surrounding it. (3) Diagram the heart, giving surface location, name and location of valves. (4) Diagram the circulation, naming the principal arteries and veins. (5) Give gross parts of the brain; name covering. (6) Describe briefly the fifth nerve. (7) Give origin, general course and distribution of the sciatic nerve. (8) Give size, location and gross structure, of the kidney. (9) Name the abdominal structures from without inward, at McBurney's point. (10) Give location of mucous and serous membranes.

M. A. Cooper, M. D.

CHEMISTRY.

(1) Name the elements that compose the Halogen group; name two useful salts of this group. (2) Define physical and chemical changes. (3) Give physical properties of mercuric chloride; give the antidote for acute poisoning. (4) Complete and name valuable product obtained 3 HgCl and 3 HCl and HNO_3. (5) What is an oxidizing agent? (6) Describe a delicate test for sugar in the urine. (7) What precaution should be taken in making aqueous solutions of potassium permanganate? (8) Give an easy way of preparing picric acid. (9) How is bread changed by toasting. (10) What are carbohydrates?

J. J. Williams, M. D.

HYGIENE.

(1) In what ways may water for drinking be purified on a large scale? (2) What methods may be used in the household for the purification of water? (3) What is the average composition of cow's milk? (4) What may be the results of using partially decomposed meat or fish? (5) What precaution should be observed to prevent the spread of infectious diseases among school children? (6) What means should be used to prevent the occurrence of malaria? (7) What regulation should be enforced to insure a high grade of milk? (8) What measures are necessary in stamping out bubonic plague? (9) How should the public be instructed so as to minimize the prevalence of cancer? (10) What disease of lower animals may be transmitted by cow's milk, and how may the transmission be prevented?

W. C. Swain, M. D.

HISTOLOGY.

(1) Give briefly the histology of the Eustachian tube. (2) Describe a red blood cell. (3) Give

histologic structure of the urinary bladder. (4) Describe the vermiform appendix, histologically. (5) Give histologic structure of the spleen. (6) Describe or draw cross section, of human nerve trunk. (7) Give histologic structure of the liver. (8) Describe briefly the histologic structure of the inactive mammary gland. (9) Give histologic structure of Fallopian Tube. (10) Draw cross section of long bone showing histology.

H. B. Mason, D. O.

MEDICAL JURISPRUDENCE.

(1) How would you prove the presence of human blood on stained garments? (2) Give immediate and remote causes of death from wounds. (3) What circumstances would help you to differentiate death from lightning from other possible causes? (4) What are the postmortem findings in a case of death from suffocation? (5) Name the conditions recognized as legal grounds for divorce. (6) What do you understand by superfoetation, and how does it occur? (7) Describe state of development of human embryo at three months. (8) With reference to the condition of the child, what does the law assume in cases of supposed infanticide? (9) What points would help to differentiate feigned from real insanity? (10) Define the terms (a) delusion; (b) illusion; (c) hallucination?

T. J. Crowe, M. D.

BACTERIOLOGY.

(1) Give a general classification of pathogenic bacteria. (2) What diseases are disseminated by means of human carriers, and what means can be adopted to prevent such dissemination? (3) In what portions of the body are typhoid germs found, and in what organs do they multiply? (4) Give the agencies and paths of entrance into the human body, of the following organisms: Meningococcus; typhoid bacillus; pneumococcus; gonococcus; triponema pallidum plasmodium (any species); bacillus pestes; bacillus of typhus; hookworm; trichina; trypanosoma gambiense; scabies acarus; tubercle bacillus. (5) Of which of the above named organisms is it possible to make cultures; why not of the others? (6) Define and give cause of anaphylaxis. (7) Define botulism and differentiate between it and the sickness caused by the bacillus enteritidis. (8) Give morphology, method of staining, name and composition of stain used, and method of cultivation of the tubercle bacillus. (9) Describe and classify the amoeba of amoebic dysentery; state what organs in the human body are its habitat and the method of its cultivation. (10) Describe and classify the organism of poliomyelitis or infantile paralysis.

H. C. Morrow, M. D.

GYNECOLOGY.

(1) What are the following: (a) Hydrosalpinx; (b) Hematometra; (c) Hydatid of Morgagni; (d) Skene's glands? (2) Describe a Vulvo-vaginal abscess. (3) How would you treat a urethral carbuncle? (4) Give symptoms of sub-involution. (5) Give details of uterine currettment, after an incomplete abortion. (6) Diagnose imperforate hymen. (7) Classify ovarian cysts. (8) How would you treat a pelvic abscess? (9) Differentiate uterine fibroid, and sarcoma of an ovary. (10) Enumerate the dangers of vaginal hysterectomy.

J. H. McLean, M. D.

PATHOLOGY.

(1) Describe the pathological histology of the kidney in chronic parenchymatous nephritis. (2) What changes in the cord take place in tabes dorsalis, and what is the most frequent cause of that disease? (3) What are the causes and most prominent symptoms of arteriosclerosis? (4) Describe a tubercle (infectious granuloma), grossly and microscopically. (5) Give briefly the pathology of various stages of syphilis. (6) Give the symptoms of, and describe the cancer of the cervic uteri. (7) Describe the process of healing by first intention. (8) Describe and give the cause of a hemorrhagic infarct of kidney. (9) Describe the process of repair in a fracture of a long bone. (10) Describe the microscopic appearance of a small round cell sarcoma and tell where it most frequently occurs.

W. C. Swain, M. D.

PHYSICAL DIAGNOSIS.

(1) Give diagnosis of a case of iritis. (2) Outline the area of normal liver dullness; (b) outline the boundary of the spleen on the chest wall. (3) Give the differential diagnosis between variola and varicella. (4) Differentiate diphtheria from follicular tonsilitis. (5) Give physical signs of stenosis of mitral valve; (a) of aortic regurgitation. (6) Give the physical signs of pericarditis with effusion. (7) Differentiate hemoptysis and hematemesis (8) Give name of sound heard over a normal lung and describe two pathologic pulmonary sounds. (9) Give physical signs in the first and second stages of lobar penumonia. (10) Define Rombergs sign; Argyle-Robertson pupil; Koplis spots; Kernig's sign.

S. L. Scothorne, D. O.

SURGERY.

(1) Give diagnosis and treatment of T fracture of humerus into the elbow joint. (2) Give diagnosis and treatment of recurrent luxation of the shoulder. (3) Give diagnosis of tuberculosis of the hip joint. (4) Describe in detail how to do a spinal puncture. (5) Describe the technique of amputation at the middle third of the leg, stating how precautionary measures are to be used to prevent a painful stump. (6) Give diagnosis and treatment of epithelioma of lower lip. (7) Give treatment of hydrocele. (8) Give causes of acute retention of urine in the adult male, and how would you give immediate relief? (9) Give differential diagnosis between tuberculous empyema of chest and empyema due to other causes; give treatment of each. (10) When would you drain and when would you remove, the gall bladder?

J. S. McCelvey, M. D.

OBSTETRICS.

(1) Describe the changes which take place in the ovum after impregnation. (2) What are the dangers of placenta praevia, to mother and child? (b) State how you would avoid these dangers. (3) Give the causes of post-partum hemorrhage, and the best method of controlling the same. (4) Give the diameters of the normal pelvis, and state which measurement is most important to the mother as regards normal labor. (5) Describe method of delivery of breech presentation; (a) what special attention should be given the after-coming head? (6) What would be your method of delivery in transverse position, after labor has begun? (7) Differentiate placenta praevia from a premature separation of a normally implanted placenta. (8) Name some of the dangers of the so-called twilight sleep, and what are the drug or drugs given, and how. (9) Name some of the most important changes in maternal organs, induced by pregnancy. (10) Give in brief, your idea of the management of the first, second and third stages of labor.

M. P. McElhannon, M. D.

PHYSIOLOGY.

(1) State the properties of a living cell. (2) Name the layers of the blastoderm and the tissues derived from each layer. (3) State the functions

of the blood taken as a whole. (4) Which would be the more dangerous to life, paralysis of the expiratory, or inspiratory muscles? Why? What is the object of respiration? (5) Name the digestive fluids and their respective enzymes. (6) Differentiate between metabolism and metrition. (7) In what way does the fetal circulation differ from that in the adult? Explain the normal heart sounds. (8) Give examples of secreting and excreting glands. State functions of liver. (9) Explain why irritation of the nerve trunk in the "stump" is referred to the amputated hand. What is necessary for the production of a reflex act? (10) How is the temperature of the body maintained and regulated.

M. F. Bettencourt, M. D.

RESULTS NOVEMBER EXAMINATION, STATE BOARD OF MEDICAL EXAMINERS.

Dr. M. P. McElhannon of Belton, Secretary, Texas State Board of Medical Examiners, reports the following results of the examination held in Dallas, November 9, 10 and 11, 1915:

PASSED.

Baldwin, J. F.	Tulane Univ.	87%
Blind, Chas. A.	Los Angeles Col. of Ost.	85%
Bose, Edda von	Univ. of Tex.	89%
Breihan, E. W.	Univ. of Tex.	88%
Buexler, C. M.	Am. Sch of Ost	78%
Covey, Clyde B.	Tufts Med. Col.	86%
Davis, N. J.	Univ. of Sydney	89%
Horn, W. S.	Rush Med. Col.	89%
Luckett, F. C.	Tulane Univ.	85%
Lodge, E. A.	Univ. of Kan.	89%
Lummis, F. R.	Jefferson Med. Col.	90%
Malone, Wm. T.	Am. Sch. of Ost.	76%
Moulton, J. S.	Tulane Univ.	87%
Nicholson, Lucian	Chicago Col. of P. and S.	83%
Neuman, Albert	Baylor Univ.	83%
Powis, H. S.	Los Angeles Col. of Ost.	82%
Piersall, C. E.	Los Angeles Col. of Ost.	78%
Redlinger, Eugene	Imperial Univ. (Germany)	75%
Reading, Boyd	Univ. of Tex.	85%
Young, L. C.	Barnes Med. Col., St. Louis	83%
Zimmerman, Geo. E.	Los Angeles Col. of Ost.	81%

FAILED.

	Am. Sch. of Ost.	
	Institute Literario	
	Nat. Sch. de Mexico	
	Meharry Med. Col.	
	Memphis Hos. Med. Col.	
	Texas Christian Univ.	
	Univ. of Louisville	
	Meharry Med. Col.	
	Meharry Med. Col.	

STATE BOARD MAKES ADDITIONAL RECIPROCITY ARRANGEMENTS.

Announcement is made that the Texas State Board of Medical Examiners has established reciprocity with Virginia, Tennessee and Mississippi, in addition to those states with which reciprocity has been in force for some time. The total list of states with which Texas reciprocates at the present time is as follows:

Missouri, Maine, Nebraska, Minnesota, Michigan, Kentucky, Illinois, Indiana, Iowa, District of Columbia, West Virginia, Maryland, Wisconsin, Vermont, North Dakota, Arkansas, Ohio, Oklahoma, New Jersey, Kansas, Nevada, Utah, Virginia, Tennessee and Mississippi.

ACCURACY IN VITAL STATISTICS.

Dr. Edgar W. Loomis, City Physician of Dallas, recently discussed this subject before the Dallas Medical and Surgical Society. Dr. Loomis held that one of the most important functions of either a city or a state government is to properly keep all birth and death statistics, which serves to make the health officer an important official. The community which has no accurate record of these two items, has no gauge for its progress in population. It should be a matter of professional interest, and a matter of pride to the layman, to reside in a community or state represented in the United States Area of Vital Statistics. If this is to be accomplished, physicians must undertake to see that both birth and death certificates are properly filled out and recorded.

A standard form of death report has been adopted, and every item called for is important. The data should be supplied exactly as called for, and in proper terms. There are many undesirable terms, such as "atrophy," "debility" and "inanition," which are bad because they are vague and do not really indicate the cause of death. "Cardiac insufficiency," "heart failure" or "heart disease" and "natural causes," are some of the terms that are not acceptable, for the reason that they are both vague and impossible of classification. Instead of heart failure, for instance, the exact heart lesion producing death should always be given. The laity is coming to know that such a statement is an evidence of ignorance on the part of the physician. There are many other indefinite terms, which are only acceptable when properly qualified, such as "peritonitis," which should be qualified by a definite statement as to the cause of the peritonitis; "shock," "surgical operation," without a qualification as to the character of the operation and the condition for which the operation was performed, and many other terms of like character.

The length of time deceased has resided in the community in which he died, is often of very great importance. The presence of many transients in any given community in search of health, tends to raise the death rate materially, and it is certainly of interest to know whether local conditions are responsible. The exact age of a baby at death should be given, because of the difference in classification of still births and those infants which live even for the briefest period of time. It is also important to know whether the child which has died early in infancy, was breast fed. Death due to external causes should be qualified in the report by an account of the nature of the cause, whether accidental, homicidal or suicidal. In poison cases, the nature of the poison and whether accidentally, homicidally or suicidally administered, should invariably be shown.

The obligation of the physician is undeniably to see that all births are properly recorded. He owes this obligation not only to the state, but to the parent of the child and the child itself. Parents should see to it that these reports are made, and it is almost an unpardonable sin for them to fail to do so. Occasionally the legitimacy of an individual may be questioned; sometimes the voting age of a man, or the age of consent of a woman, is in question, and there are numerous and various cases in the courts in which a certificate of birth would prove of the utmost value to all concerned. The accuracy of these reports is a matter of secondary consideration only to the fact that they are made at all. The name of the male parent is nearly always given correctly, but too frequently the maiden name of the mother is not recorded. This is of great importance, and it requires no argument to substantiate the statement. The nationality of the parent is of considerable importance, also, and it is not sufficient to simply state "American," when the parents were born in this country. There are other governments on this and the other American continent, which may also properly lay claim to that title. The state in which the individual is born should be given, in the instance birth occurred in the United States. If foreign born, the nation should be given, of course. Whether "white" or

"black," is of importance, but this item is rarely neglected in this country.

TRI-STATE MEDICAL SOCIETY OF ARKANSAS, LOUISIANA AND TEXAS.

The Tri-State Medical Society of Arkansas, Louisiana and Texas met in Marshall, December 14-15. President W. G. Hartt of Marshall, presided. The Reverend Dr. Sargent delivered the invocation. Hon. P. O. Beard made the address of welcome, which was responded to by Dr. E. H. Martin, Hot Springs, Arkansas.

The scientific program was rendered as follows: *Recurrent Vomiting in Children*, Dr. M. S. Picard, Shreveport, La.; *Treatment of Puerperal Septicemia*, Dr. J. F. Rosborough, Marshall; *The Diagnosis of Early Pulmonary Tuberculosis by Means of the X-ray*, Dr. S. C. Barrow, Shreveport, La.; *Surgery of the Tonsils*, Dr. R. H. T. Mann, Texarkana; *Some Important Considerations in Tonsil Surgery*, Dr. John O. McReynolds, Dallas; *Suppuration of the Middle Ear in Children, With Report of Cases*, Dr. T. D. Boaz, Shreveport; *Some Observations Concerning Vincent's Angina*, Dr. J. L. Sacles, Shreveport; *Syphilis*, Dr. S. Y. Alexander, Shreveport; *Acute Infection of the Kidneys*, Drs. Hume and Logan, New Orleans; *Treatment of Gonorrhoea in Women*, Dr. E. H. Martin. Hot Springs; *President's Address*, Dr. W. G. Hartt, Marshall; *Heredity and its Relation to Insanity*, Dr. Chas. L. Gregory, Greenville; *Medical Treatment of Gastric and Duodenal Ulcers*, Dr. J. E. Knighton, Shreveport; *A Plea For the Early Diagnosis of Pellagra*, Dr. C. R. Hargrove, Marshall; *The Alkaline Treatment of Pellagra—Report of Three Cases*, Dr. W. W. Nelson, Marshall; *Pulmonary Autogenous Vaccines*, Dr. T. C. Terrell, Fort Worth; *The Intravenous Use of Quinine in Malaria*, Dr. Thos. E. Wright, Monroe, La.; *The Direct Study of Fresh Bile Removed by Means of the Duodenal Tube, in the Diagnosis of Hepatic Diseases*, Dr. H. L. McNeil, Galveston; *Caesarian Section Under Local Anesthesia. With Report of Case*, Dr. Roger Cocke, Marshall; *Allen Treatment in Surgical Diabetes*, Dr. Jno. T. Halsey, New Orleans; *Operative Measures in Chronic Monarticular Affections of Adults*, Dr. W. C. Campbell, Memphis, Tenn.; *Acute Infectious Osteomyelitis*, Dr. S. A. Collom, Texarkana; *A Simple Method of Closing Vesico-Vaginal Fistulae*, Dr. T. F. Whiteside, Timpson.

At the business meeting twenty-eight new members were elected.

The committee on award of medals reported that owing to the stress of business they had been unable to decide the contest. Dr. R. H. T. Mann of Texarkana. agreed to donate another medal as did Dr. C. C. Sims of Mooringsport.

The following officers were elected: President, Dr. J. E. Knighton, Shreveport; vice-presidents, Drs. J. H. Weaver, Hope, Ark., C. M. Tucker, Haughton, La. and C. R. Hargrove, Marshall; secretary, Dr. J. M. Bodenheimer, Shreveport (reelected); councilors, Drs. R. H. T. Mann, Texarkana, J. L. Scales. Shreveport, J. G. Yearwood, Caspiana and S. A. Collom, Texarkana.

The secretary was instructed to write to Dr. C. A. Smith, Texarkana, expressing the sympathy of the society on account of his illness, and hoping for his speedy recovery.

The next meeting will be held in Texarkana.

MANUFACTURER OF DISINFECTANTS MAKES MISLEADING STATEMENTS.

The *Bulletin* of the New York City Health Department, November 6, makes the following statement in regard to the unreliable claims of disinfectant manufacturers:

"Without detracting from the value of disinfectants when properly used, health officials have come to learn that much of the so-called room disinfection heretofore practiced during and after infectious disease was unnecessary and are placing their main reliance on mechanical cleansing with soap and water, followed, if possible, by sunlight and fresh air.

"The manufacturers of disinfectants, on the other hand, continue to allege the advantages of their various preparations, and in support of their position often make alarming and misleading statements concerning the mode of spread of infectious diseases. Thus the suggestion was recently made that 'during the course of such diseases as typhoid fever the germ can be recovered without difficulty from horizontal surfaces near the bedside,' and that on account of this circumstance 'the Department of Health should require the periodic cleansing with antiseptic fluids of the furniture and floor about the bed.'

"In order to test the validity of this statement and the need for the suggested action, the Bacteriological Division of Mt. Sinai Hospital undertook a careful investigation, during the course of which more than forty cultures were made. The results were uniformly negative so far as the presence of a motile bacillus or any bacillus resembling the bacillus of typhoid fever was concerned. Staphylococcus was recovered in some instances, and in others contaminated cultures were obtained; but in no instance as already stated, was there any evidence of the presence of typhoid bacilli."—*American Journal of Public Health.*

TERMINAL DISINFECTION.

In seeking suitable means of defense against epidemic diseases, the practices of sanitarians have been modified from time to time in accord with the dictates of the newest contributions of the science of hygiene. The development of the art of disinfection, so as to render infectious or contagious matter inocuous, promptly led to a widespread employment of procedures intended to accomplish the desired result. Fumigation is probably the most familiar of all the methods which have received extensive recognition, though it is by no means the only one or even always the most efficient process. Heat and antiseptic solutions have likewise found an extensive field of usefulness, particularly when the disinfection is intended to be applied in a restricted area or to smaller articles or surfaces.

A few years ago, terminal disinfection was the recognized routine after the more common infectious diseases, such as diphtheria, scarlet fever and tuberculosis. Within the past decade there has been a growing tendency in many quarters to abandon terminal disinfection. To understand this change of attitude it must be remembered that there is, in some degree, a natural process of disinfection going on in the environment of disease. Drying, exposure to sunlight, and other agencies are potent factors in bringing about the destruction of infection by processes of nature. Their efficiency increases in direct proportion to the length of time and the degree to which they are permitted to act. Chapin was among the first to advocate partial abandonment of terminal disinfection in certain diseases, such as diphtheria and scarlet fever, in the belief that "the conditions which surround organisms that have been discharged from the patient's body are unfavorable for their multiplication and that the decrease of the organisms, brought about by the processes of nature, is sufficient to reduce the number of remaining organisms to a negligible quantity."—*The Journal of the American Medical Association.*

SICKNESS INSURANCE.

B. S. Warren, Washington, D. C. (*Journal A. M. A.*, December 11, 1915), says that the problem of the wage earner's health is, next to that of unemployment, the most pressing one now before us. There are approximately 30,000,000 wage earners in the United States, every one of whom loses an average of about nine days per year on account of sickness. This estimate is based on an investigation made of about 1,000,000 industrial workers and nearly coincides with the German and English figures to the same effect. Estimating the daily wage as $2 and the cost of medical services at $1 per day, the annual loss would amount to over $800,000,000, not counting the human suffering and losses due to death and decrease in efficiency. At times poverty is caused by disease and then again disease is caused by poverty, and this vicious circle must be broken. The causes of sickness are many. For some the industry is responsible; there are others for which the workers alone are responsible, and there are also community conditions for which the public is responsible, but there are many for which there is a joint responsibility and an overlapping in which each must share in the work for betterment. The industrial causes are numerous and often obscure, but are clearly shown in many occupations when careful records are kept. The responsibility of the public is becoming more and more recognized, and greater efforts are constantly being made to avoid them and prevent them. In spite of the efforts of the employers to decrease occupational risks and of the public to improve health conditions, there remains a large residue for which the employees are themselves to blame. Warren points out, however, that they cannot be held entirely responsible for every part of their environment, and poverty and ignorance go hand in hand. He figures the cost and maintenance of a wage earner's family and the inability of the larger part of them to maintain good healthful home conditions. Co-operative action is apparently the best remedy for this, and he sees it in a system of sickness insurance and offers what he considers a practical plan, which is given in detail. Such a plan can be carried out, he thinks, as a health measure, and if it could be put into practice it would be the greatest possible health measure ever enacted.

TREATMENT WAS "ABSENT."

To many who have read the much over-written case of the Chicago infant who recently came into, and went out of, this world with certain deformities, the question doubtless occurred: What would the followers of Mrs. Eddy do in such a case? Logically, the followers of this cult would have done just what happens to have been done by the physician in charge: Nothing. And the result, of course, would have been the same. Possibly because this line of thought is rather obvious, the *Christian Science Monitor* devotes over a column to the case. Under the sonorous title '*Ave Medicus Imperator*,' this journalistic champion of Mrs. Eddy's doctrines belabors the medical profession, charging that 'the place of Caesar as a dispenser of life and death is to be taken by the modern physician,' and further, that 'the hospital is to usurp the position of the arena.' The article, of course, is wholly in the nature of a back-fire. The poor human mite whose short but tragic life and equally tragic death has proved such a boon to the sensational newspapers and such a grief to the thoughtful, really 'passed over' strictly according to the tenets of Mrs. Eddy's disciples. We assume, naturally, that even the most rabid of that sect would hardly claim that thought-waves, either long or short range, would remedy a congenital deformity. The baby died because 'treatment' was 'absent.'—*Jour. Amer. Med. Assn.*

POLLUTION OF STREAMS BY MUNICIPAL SEWERAGE.

The City of Henderson, Ky., discharged its sewerage into a small stream called Canoe Creek. The slop from a distillery which was for some time discharged with the city sewerage, settled to the bottom of the creek and decomposed, killing the fish, making the water unfit for drinking by stock, and creating a stench. Owners of property along the bank of the stream brought suit against the city and the operator of the distillery for damages to their property.

The Court of Appeals of Kentucky decided that the city was liable, but relieved the operator of the distillery, holding that, as the city had permitted the distillery to connect with the city sewers and had made no attempt to regulate the character of matter discharged from the distillery into the sewers, the city was responsible for the damage done.

The essential part of the opinion is published in this issue, (Nov. 5th) page 3303.—*Public Health Reports.*

CHIROPRACTORS.

T. F. Duhigg, Des Moines, Iowa, (*Journal A. M. A.*, December 25, 1915), in view of the coming legislative sessions in which the chiropractors will be apt to demand recognition, gives some account of the chiropractor schools and quotes at length a report of the Inspector of the Pennsylvania Bureau of Medical Education and Licensure on the three chiropractic colleges of Davenport, Iowa. While the chiropractic school is not recognized in Iowa, and its practitioners are subject to fine, it probably graduates more of this class than any other three states. The Pennsylvania inspector's report shows very fully what sort of qualifications the output of the Iowa chiropractic schools furnish. "It is sufficient to say that the three schools are uniform on the following points: None has a library, a hospital, a laboratory that is worthy of the name, post-mortems or capable teachers." According to the report the preliminary and graduation requirements correspond.

SCHOOL BOARDS MAY REQUIRE PHYSICAL EXAMINATION OF SCHOOL CHILDREN.

For several years there has been in force in the schools of Aberdeen, S. Dakota, a regulation requiring that each child seeking admission into the schools must furnish a "physical record card," signed by a physician, giving certain information relative to the physical condition of the child. This report might be made by a physician employed by the parent, but if none was furnished the child was examined and the report made by the school physician.

The Supreme Court of South Dakota decided that the regulation was reasonable and valid, that it did not unlawfully bar any pupil from the schools, and that the school board had authority to adopt it. The opinion of the court is published in full at page 3361 of this issue.—*Public Health Reports.*

MEDICAL LICENSURE.

"The responsibility for the licensing of medical practitioners has been left by the national government to the individual states; it is left to the state to establish the only legal barrier possible between the public and the thousands who seek authority to treat human diseases. Some states have provided an efficient guaranty that practitioners given the state's endorsement have secured the essential edu-

cational qualifications. In some states, however, the responsibility has been taken up in such a happy-go-lucky manner, and the legislation provided is so contrary to effective legal procedure, that the situation would be laughable were it not for the serious menace to the public. In some states, laws have been passed, admirable in their composition and excellent in their purpose, only to be invalidated by clauses or by other laws exempting the very persons to whom the law should apply. Invariably, the exemptions are those unable to comply with the educational requirements of the practice act and against whom the people most need protection—those who have had little or no medical training. The making of such exemptions, either by special clauses in the practice act or by laws providing special boards and lower educational standards," says *The Journal of the American Medical Association*, "is clearly perverting medical licensure, so that instead of protecting the public against the incompetent, it is providing special privileges for the incompetent, untrained men and women parading as the apostles of some 'new and marvelous' form of healing. Legislators have yet to learn that the art of healing is not gained by birth or by inspiration, but by a rigid and prolonged course of training in the fundamentals of medicine. The only way to make medical licensure a real protection of the public is to provide one licensing board in each state with ample power to apply one educational standard alike to all practitioners of the healing art."

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1915, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies:"

Bismuth Tribromphenate.—Basic bismuth tribromphenate. It is claimed to be a non-irritant and non-toxic antiseptic and an odorless and efficient substitute for iodoform. It is said to be of value in gastro-intestinal catarrh, proctitis, dysentery, diarrheas, etc. Merck & Co., New York. (*Jour. A. M. A.*, Nov. 13, 1915.)

Butyl-Chloral Hydrate, Merck.—A non-proprietary brand of butyl-chloral hydrate admitted to New and Nonofficial Remedies. Merck & Co., New York. (*Jour. A. M. A.*, Nov. 13, 1915.)

Ethyl Bromide, Merck.—A nonproprietary brand of ethyl bromide admitted to New and Nonofficial Remedies. Merck & Co., New York.

Homatropine Hydrochloride, Merck.—A non-proprietary brand of homatropine hydrochloride admitted to New and Nonofficial Remedies. Merck & Co., New York.

Sodium Cacodylate, Merck.—A non-proprietary brand of sodium cacodylate admitted to New and Nonofficial Remedies. Merck & Co., New York.

Iodothyrine Tablets, 3 Grains.—Each tablet contains iodothyrine 3 grains. The Bayer Company, Inc., New York.

Thyresol Pearls, 5 Grains.—Each pearl contains thyresol 5 grains. The Bayer Company, Inc., New York.

Theocin-Sodium Acetate Tablets, 1½ Grains.—Each tablet contains theocin-sodium acetate 0.1 Gm. The Bayer Company, Inc., New York.

Swan's Typhoid Bacterin (No. 44) (Prophylactic).—Marketed in packages of three 1 Cc. vials and also in packages of six 1 Cc. vials. Swan-Myers Company, Indianapolis, Ind. (*Jour. A. M. A.*, Nov. 27, 1915.)

Ampuls Emetine Hydrochloride, Mulford, 1½ Grains.—Each ampule contains emetine hydrochloride 0.005 Gm. H. K. Mulford Co., Philadelphia.

Ampuls Emetine Hydrochloride, Mulford, 1/3 Grain.—Each ampule contains emetine hydrochloride 0.02 Gm. H. K. Mulford Co., Philadelphia.

Ampuls Emetine Hydrochloride, Mulford, ⅔ Grain.—Each ampule contains emetine hydrochloride 0.04 Gm. H. K. Mulford Co., Philadelphia.

Ampuls Sodium Cacodylate, Mulford, 1½ Grains.—Each ampule contains sodium cacodylate 0.1 Gm. H. K. Mulford Co., Philadelphia.

Ampuls Sodium Cacodylate, Mulford, 3 Grains.—Each ampule contains sodium cacodylate 0.2 Gm. H. K. Mulford Co., Philadelphia.

Ampuls Quinine and Urea Hydrochloride, 1%, Mulford.—Each ampule contains 5 Cc. of a sterile 1 per cent solution of quinine and urea hydrochloride. H. K. Mulford Co., Philadelphia.

Ampuls Mercury Succinimide, Mulford, 1/6 Grain.—Each ampule contains mercury succinimide 0.01 Gm. H. K. Mulford Co., Philadelphia.

Calcium Peroxide, P. W. R.—A non-proprietary preparation of calcium peroxide admitted to New and Nonofficial Remedies. Powers-Weightman-Rosengarten Co., Philadelphia.

Magnesium Peroxide, P. W. R.—A non-proprietary preparation of magnesium peroxide admitted to New and Nonofficial Remedies. Powers-Weightman-Rosengarten Co., Philadelphia.

Sodium Peroxide, P. W. R.—A non-proprietary preparation of sodium peroxide admitted to New and Nonofficial Remedies. Powers-Weightman-Rosengarten Co., Philadelphia.

Strontium Peroxide, P. W. R.—A non-proprietary preparation of strontium peroxide admitted to New and Nonofficial Remedies. Powers-Weightman-Rosengarten Co., Philadelphia.

Zinc Peroxide, P. W. R.—A non-proprietary preparation of zinc peroxide admitted to New and Nonofficial Remedies. Powers-Weightman-Rosengarten Co., Philadelphia.

Sodium Perborate, P. W. R.—A non-proprietary preparation of sodium perborate admitted to New and Nonofficial Remedies. Powers-Weightman-Rosengarten Co., Philadelphia.

Formic Acid, Merck.—A non-proprietary preparation of formic acid admitted to New and Nonofficial Remedies. Merck & Co., New York.

Agar Agar Powder, Merck.—A non-proprietary preparation of agar agar admitted to New and Nonofficial Remedies. Merck & Co., New York.

Agar Agar Shreds, Merck.—A non-proprietary preparation of agar agar admitted to New and Nonofficial Remedies. Merck & Co., New York.

Berberine Hydrochloride, Merck.—A non-proprietary preparation of Berberine hydrochloride admitted to New and Nonofficial Remedies. Merck & Co., New York.

Fluorescein, Merck.—A non-proprietary of fluorescein admitted to New and Nonofficial Remedies. Merck & Co., New York.

Mercury Cyanide, Merck.—A non-proprietary preparation of mercury cyanide admitted to New and Nonofficial Remedies. Merck & Co., New York.

Mercury and Potassium Iodide, Merck.—A non-proprietary preparation of potassium mercuric-iodide admitted to New and Nonofficial Remedies. Merck & Co., New York.

PROPAGANDA FOR REFORM.

Swan's Rheumatic Bacterin (Mixed) No. 47.—According to the manufacturer, The Swan-Myers Co., Indianapolis, Ind., this preparation contains

pneumococci, Friedlaender's bacilli and streptococci (polyvalent). The Council on Pharmacy and Chemistry refused to admit this vaccine to New and Nonofficial Remedies because there is no satisfactory evidence that either the pneumococcus or Friedlaender bacillus is concerned in the etiology of acute or chronic rheumatism or rheumatoid arthritis and no conclusive evidence that the streptococcus is an etiologic factor. (*Jour. A. M. A.*, Nov. 6, 1915.)

Elixir Iodo-Bromide of Calcium Comp.—The Tilden Company, New Lebanon, N. Y. and St. Louis, Mo., sells "Elixir Iodo-Bromide of Calcium Comp. without Mercury" and "Elixir Iodo-Bromide of Calcium Comp. with Mercury." The latter is said to contain, in addition to the ingredients of the former, 1/100 gr. mercuric chloride in each fluidram. The "formula" of the elixir without mercury is stated to be: "Salts of Iodine, Bromine, Potassium, Sodium, Calcium, Magnesium with Stillingia, Sarsaparilla, Rumex, Dulcamara, Lappa, Taraxacum, Menisperum." Advertising circulars give "formulas" which differ somewhat from the preceding. None of the "formulas" gives the quantities of all of the several constituents. The Tilden Company asks physicians to depend on these preparations in the treatment of syphilis. While it seems incredible that any physician would jeopardize the health—even the life—of a patient by accepting this advice, the fact that certain medical journals advertise these preparations with the caption "The Conquest of Syphilis" made it incumbent on the Council on Pharmacy and Chemistry to record its condemnation of the employment of these unscientific, semisecret mixtures. (*Jour. A. M. A.*, Nov. 6, 1915.)

The Autolysin Treatment.—There were strong evidences from the beginning of a commercial spirit in the exploitation of this treatment. Letters sent to physicians further illustrate the method of promoting this unproved and possibly dangerous treatment. Dr. Richard Weil, who had the opportunity of personally witnessing the application of this compound in a long series of cases at the General Memorial Hospital, expresses the belief that autolysin is useless, that it adds nothing of value to the methods now generally accepted, and that it often aggravates the sufferings and accelerates the death of the patient. (*Jour. A. M. A.*, Nov. 6, 1915.)

Varlex Compound.—This is an alleged cure of the liquor and tobacco habit of the "prescription fake" variety. Advertisements advise the secret administration of: Water 3 ounces, muriate of ammonia 20 grains, Varlex Compound one package, pepsin 10 grains. The A. M. A. Chemical Laboratory reports that Varlex Compound consisted of approximately 97 per cent milk sugar and 3 per cent moisture. (*Jour A. M. A.*, Nov. 6, 1915.)

Alkalol.—Analysis in the A. M. A. Chemical Laboratory indicated Alkalol, which is advertised as useful in inflammations of the nose and throat, to be essentially an aromatized, weakly alkaline, saline solution containing a small amount of chlorate, probably potassium chlorate; it yielded about 2 per cent of solids, mainly alkali chlorid, chlorate and bicarbonate. Of this 2 per cent about one-half was bicarbonate. (*Jour. A. M. A.*, Nov. 6, 1915.)

Dr. Charles Flesh Food.—This is an ointment sold under such claims as "Applied to the skin nourishes by absorption" and "it builds firm, healthy flesh." It is also said to be an efficient bust developer. Analysis in the A. M. A. Chemical Laboratory indicated the following: Starch 38.5 per cent, petrolatum 51.0 per cent, zinc oxide 2.0 per cent, impure stearic acid 1.5 per cent, perfume, coloring matter. (*Jour. A. M. A.*, Nov. 13, 1915.)

Freckle and Beauty Lotions.—The worthlessness and, in many instances, the dangerous character of nostrums sold as freckle removers and beautifying preparations are indicated by the following analyses, taken from the reports of various state chemists: Hill's Freckle Lotion was found to be a 1.84 per cent solution of corrosive mercuric chloride. Kingsbery's Freckle Lotion was found to be a solution of corrosive mercuric chloride containing 5.3 parts in 1000. Kulux Compound, a "prescription fake" freckle and tan remover, was found to contain zinc oxide, bismuth subcarbonate, glycerine and water. Mrs. McCorrison's Famous Diamond Lotion No. 1, said to remove moths, freckles, pimples, etc., was found to be essentially a solution of 28.2 parts of corrosive mercuric chloride in 1000 of water. Neroxin, a "prescription fake" said to remove blackheads, was found to contain borax 55 per cent and "soda" 25 per cent. Othine, sold as a freckle remover, is reported to contain bismuth subnitrate and ammoniated mercury with a fatty base. Perry's Moth and Freckle Lotion Compound was found to be a 16 in 1000 solution of corrosive mercuric chloride containing in addition a small amount of a lead salt. Pyroxin, sold on the "prescription fake" plan as an eyebrow and eyelash grower, was found to be perfumed vaseline. Rose-Kayloin, advertised in fake health departments of some newspapers, was found to contain 80 per cent sulphate and 15 per cent potassium carbonate. Mme. Rupert's Face Bleach is reported to be a 4 in 1000 alcoholic solution of corrosive mercuric chloride, containing a small amount of benzoin. Stillman's Freckle Cream was found to be an ammoniated mercury paste. Tan-A-Zin, a complexion beautifier, was found to have for its essential ingredient ammoniated mercury. Sarah Thompson's "Wrinkle Lotion" was found to contain alum 7 per cent, glycerine 29 per cent and water 64 per cent. Zintone, said to produce a faultless complexion quickly, is reported to contain borax 23 per cent, stearic acid and soap 77 per cent. Though the external use of mercury salts is fraught with danger, the nostrums above shown to contain such poisonous ingredients are sold with the claim that they are practically harmless. (*Jour. A. M. A.*, Nov. 20, 1915.)

Iodeol and Iodagol.—Both appear to be iodine preparations. They are advertised as "Electro-Chemical Colloidal Iodine." Iodeol is recommended as "Iodine with all its potentialities . . . stripped of all its drawbacks—non-irritating, non-caustic, non-toxic, non-cumulative, injectable without pain." No adequate evidence is offered in support of the therapeutic claims made for Iodeol and Iodagol, although the assertions as to the action of Iodeol in tuberculosis and pneumonia, in particular, are susceptible of test by laboratory and animal investigation. (*Jour. A. M. A.*, Nov. 27, 1915.)

Laxative Bromo Quinine.—From the analysis of the A. M. A. Chemical Laboratory it appears that each tablet of Laxative Bromo Quinine contains, as essential ingredients, phenacetin about 2 grs., caffein 1/5 gr., quinine or cinchona alkaloids 2/5 gr. and aloin or aloes. While the name gives the impression that bromine and quinine are the important ingredients, the bromide content corresponds only to 1/500 part of a pharmacopoeial dose of potassium bromide. In order to get a pharmacopoeial dose of quinine, it would be necessary to take ten laxative Bromo Quinine Tablets. If this were done, the person would get twenty grains phenacetin, a dangerously poisonous dose. As phenactein is the essential ingredients of Laxative Bromo Quinine it is evident that this widely exploited nostrum is misbranded. (*Jour. A. M. A.*, Nov. 27, 1915.)

Anesthesin.—Anesthesin is paramino-ethyl-benzoate. New and Nonofficial Remedies states that it is one of the products which owe their existence to the discovery that the local anesthetic action of cocaine is due to the radical of benzoic acid in combination with a nitrogen-containing basic group. Treasury Decision 2184 contemplates the registration of anesthesin under the Harrison narcotic law. (*Jour. A. M. A.*, Nov. 20, 1915.)

NEWS

Metropolitan Life Insurance Company Co-Operates in Work for Prevention of Blindness.—The Metropolitan Life Insurance Company has issued an educational leaflet, entitled "Mother, Baby and Midwife," which warns prospective mothers against the employment of untrained midwives and also gives instructions concerning the prevention of blindness through proper care at the time of a baby's birth.

Medical Journals Consolidated. — Physicians Drug News and Office Practitioner has been acquired by The Critic and Guide Company and will be consolidated with The Critic and Guide beginning with January, 1916. The consolidated journal will remain under the editorship of Dr. William J. Robinson of New York City.

Health Exposition at Rosenburg.—The Civic League of Rosenburg conducted a health exposition during the week of December 16th. A large attendance was had on each day, which included many school children under the care of their teachers.

The exhibit contained a comprehensive display of health charts, sanitation and kindred subjects, which were in charge of Dr. A. Schlafli, of the Texas State Board of Health, and continuous lectures were made during the week.—*Houston Chronicle.*

Medals Awarded for Original Research.—The Tri-State Medical Society of Arkansas, Louisiana and Texas, has awarded gold medals for original research work, as follows:

First prize, Dr. T. E. Wright, Monroe, La.
Second prize, Dr. H. L. McNeil, Galveston, Texas.
Third prize, Dr. T. C. Terrell, Fort Worth, Texas.

These papers were read at Marshall, December 14-15. The next meeting will be held in Texarkana in December, 1916.

The Society has voted to renew its offer for another year. The meeting will take place in December, at Texarkana.

Data From Texas Physicians Wanted.—The Evans Memorial for Clinical Research is desirous of coming into communication with as many physicians as possible who have used bacterial vaccines in the treatment of typho'd fever, for the purpose of collecting statistics concerning the efficiency or non-efficiency of the method as a therapeutic measure. If any who have done this even with only one or a few cases will send their names and addresses, blank forms will be sent to them upon which uniform reports may be made. Due credit will be given to each in any reports that may be published. Kindly address all communications to Dr. W. H. Watters, 80 East Concord St., Boston, Mass.

New Hospital for Eye Diseases to be Established in Oklahoma.—Mr. Charles Page, a millionaire oil operator of Tulsa, Oklahoma, has announced that he will establish a semi-charitable Eye Hospital and Sanitarium at Sand Springs, Oklahoma, at a cost of $200,000. The institution will consist of several buildings covering about 80 acres. There will be distinct units for whites, Indians and negroes. Trachoma, with which about 75 per cent of the Indians of that State are afflicted, will receive special attention. The institution will be under the management of Drs. Daniel W. and Peter C. White, who for years were the government trachoma experts, working among the Indians of Oklahoma.

Salvarsan Promised.—It is again announced that the French and British Governments have agreed, at the request of the United States, to allow the shipment of a six month's supply of salvarsan and neosalvarsan from Rotterdam to this country. It is hoped that a sufficient supply to meet all demands will be here within the next three or four weeks or earlier. There will be no increase in the price of the drug. An effort will be made, it is said, to induce the patentees to allow the product to be made in this country. Dr. Baketel having given assurances to the British Government to this effect. Physicians are, in the meanwhile, warned against spurious products, said to be made in Canada, which have been offered for sale in New York, Chicago, and other large cities.—*Medical Record.*

Texas Roentgen Ray Society to Meet in Temple.—The Texas Roentgen Ray Society will hold its third annual meeting in Temple, January 10th. The following program has been announced: *President's Address*, Dr. J. M. Martin, Dallas; *The Use of the X-Ray in the Diagnosis of Pulmonary Tuberculosis*, Dr. I. S. Kahn, San Antonio; *X-Ray Diagnosis of Stone*, Dr. I. E. Colgin, Waco; *Gunshot Fractures*, with plates, Miss Lena Shenners, Kingsville; *The Fuse Method of Timing Radiographs*, Mr. Geo. F. Townsend, Fort Worth; *A Comparative Study in Bone and Joint Diagnosis*, Dr. Geo. D. Bond, Fort Worth; *Nephrolithiasis*, Dr. R. T. Wilson, Temple; *Further Observation With the Use of the Coolidge Tube*, Dr. L. W. Kuser, Gainesville; *A Report on Five Hundred Gastro-Intestinal Examinations*, Dr. Robt. H. Millwee, Dallas; *A Report of the Proceedings of the American Roentgen Ray Meeting*, Dr. W. S. Hamilton, San Antonio.

Control of Trachoma in Schools of Douglas, Arizona.—The school board of Douglas, Arizona, has demonstrated that systematic inspection and treatment of pupils affected with trachoma, will eventually eradicate the disease from the schools. Last year there were 78 cases discovered and placed under observation and treatment, while only 5 are being taken care of now. Only 4 new cases were discovered this year. In each instance the children having trachoma are new arrivals from other towns, chiefly Mexicans. A systematic inspection of the school children as to eyes, nose, throat, lungs, etc., is made by the school physician, and the school nurse follows up these cases and sees that the children are properly cared for. Great improvement in the health of the school children of Douglas has been noted since this inspection has been put in force, and the teachers report there is less absence on account of illness this year than in a period of several years. Medical inspection is responsible for this greatly to be desired result.

Typhus Fever.—It is reported that typhus fever has reached Texas from Mexico. December 24, three cases were reported at Laredo, where hundreds of Mexican refugees have gathered. The United States Public Health Service has detailed special agents to all towns along the border, and at these places a rigid quarantine will be established. Dr. C. C. Pierce of the Public Health Service, has been ordered from San Francisco to Laredo to take charge of the situation. The Red Cross has taken up the question of attempting to render assistance should it be needed. The State Board of Health of Texas is likewise alive to the situation and orders have been issued to all quarantine stations to enforce the twelve-day detention rule on all persons coming to Texas from the infected districts and from Mexico,

and to disinfect and fumigate all baggage and railroad cars. State Health Officer Collins visited Laredo, December 24, and gave instructions for the enforcement of quarantine and for the care of the patients there.—*The Journal of the A. M. A.*

Diphtheria on the Increase.—The Sanitary Reports received by the State Health Department up to December 20th from 77 counties and 21 cities, show 417 cases of scarlet fever in November as opposed to 321 in October, an increase of 86 cases. The same counties and cities report 650 cases of diphtheria for November, while October shows 533, an increase of 117 cases. 61 deaths from diphtheria in October and in November 83 deaths from the same cause were reported to the Department. With this epidemic during the first three months of the school term and the death list of 170 since September 1, and the cost $70,410, these figures will be multiplied many times before the winter is over, and the school term is completed, unless the parents demand the protection for their children that they are entitled to.

The State Board of Health has placed the preventtive serum for diphtheria within the reach of every individual in the State of Texas at the nominal price of 50 cents, and at the same time, the curative serum at a proportionately low price. When there is doubt as to diagnosis, use the serum, and if there is no laboratory accessible or the patient cannot stand the expense, send the specimen to the State Board of Health and it will be examined free of cost.

The Harrison Antinarcotic Law.—Two decisions by United States courts construing section 8 of the Harrison Antinarcotic Law have recently appeared. This section makes it unlawful for any person who has not registered and paid the tax under the law to have in his possession or under his control any of the habit-forming drugs named in the act, and such possession or control is made presumptive evidence of a violation of the act.

The United States District Court for the Western District of Washington took the view that Congress intended to prevent the importation, manufacture or sale of habit-forming drugs except as allowed by the law, and that the law should be so construed as to carry out this intention.

The same section was considered by the United States District Court for the State of Montana about the same time. Judge Bourquin decided that section 8 applies only to persons who are required to register under the law. In his opinion he says that mere consumers of the drugs "are not within section 1, and section 8 does not purport to extend the registration and taxation features of the act to them, or to any one, but only to make unlawful mere possession of the drugs by any person of the classes by section 1 required to register and pay, and who have not, and to create a statutory rule of evidence."

The opinion in the latter case is published in this issue of the Public Health Reports, page 3715.—*Public Health Reports.*

Endowment of $500,000 to American College of Surgeons.—The American College of Surgeons has issued an announcement that it has secured from its Fellows an endowment fund of $500,000. This fund is to be held in perpetuity, the income only to be used to advance the purposes of the College.

The College, which is not a teaching institution but rather a society or a college in the original sense, now lists about 3,400 Fellows in Canada and in the United States.

The Regents propose at an early date to present a clear conception of the College to the undergraduate medical students of this continent. They will ask each senior student who has in mind to specialize in general surgery or any branch of surgery to register with the College. When these students later serve as internes and surgical assistants, they will be requested to report the facts to the College.

The College will seek accurate data on all matters which relate to hospitals. From time to time it will publish studies upon hospital problems, the purpose being always to be helpful to the hospitals. These publications, further, will inform recent medical graduates as to where they may seek adequate general or special training in surgery. To be concrete, the College will deal with such problems as (a) the proper equipment for medical diagnosis, e. g., well equipped laboratories for chemical, pathological, and X-ray work; (b) the proper forms for case histories and the facilities for keeping these records; (c) the management and the curricula of the nurses' training schools; (d) the specialization essential in any well organized hospital.

Examination of Candidates for Assistant Surgeon, United States Public Health Service.—Boards will be convened at the Bureau of Public Health Service, 3 "B" Street, S. E., Washington, D. C., and at a number of the Marine Hospitals of the Service, on Monday, January 24, 1916, at 10 o'clock a. m., for the purpose of examining candidates for admission to the grade of Assistant Surgeon in the Public Health Service.

The candidate must be between 23 and 32 years of age, a graduate of a reputable medical college, and must furnish testimonials from two responsible persons as to his professional and moral character, together with a recent photograph of himself. Credit will be given in the examination for service in hospitals for the insane, experience in the detection of mental diseases, and in any other particular line of professional work. Candidates must have had one year's hospital experience or two years' professional work. They must be not less than 5 feet, 4 inches, nor more than 6 feet, 2 inches, in height, with relatively corresponding weights.

The following is the order of examination: 1, Physical; 2, Oral; 3, Written; 4, Clinical.

Examinations are chiefly in writing, and begin with a short autobiography of the candidate. The remainder of the written exercise covers the various branches of medicine, surgery and hygiene. The oral examination includes subjects of preliminary education, history, literature and natural sciences. The clinical examination is conducted at a hospital.

The examination usually covers a period of about ten days.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order. They will receive early appointments. After four years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon. Passed Assistant Surgeons after twelve years' service are entitled to examination for promotion to the grade of surgeon.

Assistant Surgeons receive $2,000, passed assistant surgeons $2,400, surgeons $3,000, senior surgeons $3,500, and assistant surgeon-generals $4,000 a year. When quarters are not provided, commutation at the rate of $30, $40 and $50 a month, according to the grade, is allowed. All grades receive longevity pay, 10 per cent in addition to the regular salary for every five years up to 40 per cent after twenty years service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For invitation to appear before the board of examiners, address Surgeon-General, Public Health Service, Washington, D. C.

SOCIETY NEWS.

EL PASO DISTRICT—No. 1.

Dr. F. P. Miller, El Paso, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, El Paso, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

El Paso—Dr. C. F. Braden, El Paso; 1st and 3rd Mondays, September to May inclusive.

Reeves-Ward-Pecos—Dr. O. J. Bryan, Pecos.

El Paso County Medical Society held its annual meeting in December. The following officers were elected: President, Dr. E. R. Carpenter, El Paso; vice-president, Dr. W. H. Pickles, El Paso; secretary-treasurer, Dr. C. F. Braden (re-elected); delegate, Dr. R. L. Ramey, El Paso; alternate, Dr. W. L. Brown, El Paso; censors, Drs. L. G. Witherspoon, G. Werley and J. W. Tappan, all of El Paso; committee on public health and legislation, Drs. M. B. Wesson, W. R. Jamieson and Geo. Brunner. The Milk Commission is composed of the following: Drs. Branch Craige, J. M. Richmond, J. A. Rawlings, E. C. Prentiss, F. D. Garrett and H. T. Safford. Dr. M. B. Wesson was elected editor of the *Bulletin*, and librarian of the society.

The secretary, Dr. Braden, read his annual report, from which the following is taken:

On January 1, 1915, there were on the rolls 70 members in good standing. During the year 11 new members have been added, making a total membership of 81, less one member lost by death. During the year 16 regular and 2 called meetings were held, with an average attendance of 22 for the regular meetings. There are 9 non-resident members. Of the 72 local members 12, or 16 per cent, did not attend a single meeting during the year. The honor for best attendance goes to Drs. Paul Gallagher and G. Werley, who have a perfect score. Next are Drs. Irving McNeil and C. F. Braden, with an attendance of 14 meetings. Twelve members, or 16 per cent of the membership, attended only one meeting; seven were in attendance upon two meetings, three attended three meetings, three attended four, eight attended five, six attended six, three attended seven, five attended eight, three attended nine, three attended ten, one attended eleven and two attended twelve meetings.

Early in the present year (1915) plans were under discussion to promote a larger attendance at our meetings. One plan, that of carrying on an active contest between rival divisions to bring out the members, was adopted by the society. The captains of the two teams were named by the President, but the plan died from *inocuous desuetude*.

It may not be amiss at this point to offer a suggestion. Our meetings are too long. We can have shorter meetings if our proceedings are divided. Our society is now large enough to undertake more systematic methods of handling the scientific material that is available. We should have weekly sessions, two meetings in a month being devoted to clinical cases and case reports, and two meetings to the reading of scientific papers and their discussion. The members should be encouraged to present the clinical material so abundant in El Paso, and it should be a rule that each member presenting a clinical case must have a type-written history of the case, which then becomes the property of the society for its records or for publication. Extemporaneous histories, as given in the past, are of no real value unless the society will employ a regular stenographer to take accurate notes of these cases. This rule will encourage members to go more thoroughly into the clinical cases presented, and if an accurate transcript of the discussion can be arranged for, we should be able to accumulate a valuable addition to our records. These cases and their discussion can be published in pamphlet form at the end of each year, at a low cost, and each member could be furnished a copy free, thus increasing the value of membership in the society.

I would suggest that all business matters pertaining to the society be relegated to the Board of Censors and the President, Vice-President and Secretary, as an executive committee, whose function it should be to attend to details of business, making either quarterly or semi-annual reports to the society. Accurate minutes of the meetings of this executive committee should be kept and placed on file.

During the year 23 papers were read, classified as follows: General surgery, 5, contributed by Drs. Hugh White, Pickels, Witherspoon, Rogers and Strong; special surgery, 3, two by Dr. Carpenter and one by Dr. Jamieson; medical, 7, contributed by Drs. Rawlings, Stevens, Stark, Irvin, Prentiss, Reinemund and Schuster; tuberculosis, 2, contributed by Drs. Homan and Hendricks; hygiene and sanitation, 2, by Drs. Waite and Thompson; research, 2, by Drs. W. L. and C. P. Brown and Crouse; insurance, 1, by Dr. McNeil; obstetrics, 1, by Dr. Paul Gallagher.

So far as I am able to gather from my meagre records, 27 clinical cases were presented at the various meetings. These I have arbitrarily classified as: Surgical, 6; medical, 21. Further classification shows 3 cases of malignancy (cancer); syphilis, 7; tuberculous lesions, 3; injuries and wounds, 3; congenital dislocation, 1; sinus of bladder, 1; diphtheria, 1; pellagra, 4; siderosis bulbae, 1; goitre, 1, and mastoiditis, 1.

We have approximately 5,000 volumes in our library. The outlay represents a cost of about three and three-quarter cents per volume. Estimating the books to be worth, at the lowest 25 cents a volume, we have a library worth $1,250.00 at a cost of $187, practically the cost of installing. I feel that the membership should join in an unanimous vote of thanks to Dr. Wesson, to whose untiring efforts we owe this splendid showing.

The assets of the society, including library books, shelving, furniture, fixtures, portraits, etc., amount to $1,667.10; while the total liabilities are $96.40, making the net assets amount to $1,570.70.

I wish to call your attention to the fact that the society is bound to grow and from the figures I have given it becomes evident that if we are to increase our field of activities and our resources, we must increase our dues. It appeals to me as simply a question of whether or not the society is giving us value received and to what degree this will obtain if we increase our dues. Personally I believe my membership is worth fifty cents a month or six dollars a year for local dues. The State Association dues amount to 25 cents a month, and I believe the State Journal alone is worth that.

The total expense net cost to the society of issuing the *Bulletin* for 1915, exclusive of December, amounts to $1,016.30, over a cost of $812.17 for 1912, the year it was instituted.

BIG SPRINGS DISTRICT—No. 2.

Dr. N. J. Phenix, Colorado, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Ector-Midland-Martin-Howard—Dr. W. F. Johnston, Big Springs; 2nd Thursday quarterly.

Fisher-Stonewall—Dr. R. I. Grimes, Sylvester; 1st Tuesday in January and March.

Jones—Dr. A. McK. Jones, Anson; 2nd Tuesday monthly.

Knox-Haskell—Dr. Judd E. Hammond, Munday.

Mitchell—Dr. T. J. Ratliff, Colorado; 2nd Monday January, April, July and October.

Nolan—Dr. A. A. Chapman, Sweetwater.

Scurry-Dickens-Kent—Dr. J. M. Bannister, Snyder; 1st Tuesday in January, April, July and October.

Taylor—Dr. L. J. Pickard, Abilene; 2nd Tuesday monthly.

PANHANDLE DISTRICT—No. 3.

Dr. C. R. Hartsook, Wichita Falls, Councilor.

District Society—Dr. T. D. Frizzell, Quanah, President; Dr. J. J. Crume, Amarillo, Secretary.

Secretaries of Sections—Surgery, Dr. F. B. Bryan, Childress; Medicine, Dr. E. H. Snyder, Canadian; Gynecology and Obstetrics, Dr. B. L. Jenkins, Clarendon; Pediatrics, Dr. S. P. Vinyard, Amarillo.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Childress—Dr. F. B. Bryan, Childress; 1st Tuesday monthly.

Collingsworth—Dr. H. B. Worley, Wellington; Tuesdays.

Dallam-Hartley-Sherman—Dr. R. L. Owens, Dalhart; 2nd Tuesday.

Donley—Dr. T. H. Ellis, Clarendon; 1st Thursday monthly.

Foard—Dr. R. L. Kincaid, Crowell; 2nd Monday quarterly.

Hale-Swisher—Dr. A. H. Lindsay, Plainview; 2nd Tuesday monthly.

Hall—Dr. W. C. Mayes, Memphis; 2nd Tuesday monthly.

Hardeman—Dr. T. D. Frizzel, Quanah; 2nd Thursday monthly.

Hemphill-Roberts-Lipscomb-Ochiltree—Dr. H. C. Caylor, Canadian; 1st Monday monthly.

Lubbock-Crosby—Dr. J. T. Hutchinson, Lubbock; 1st and 3rd Tuesdays monthly.

Potter—Dr. J. J. Crume, Amarillo; 2nd Monday monthly.

Wichita—Dr. Q. B. Lee, Wichita Falls; 2nd Tuesday monthly.

Wilbarger—Dr. Richard W. Hix, Vernon; 3rd Monday monthly.

THE HALE-SWISHER COUNTY MEDICAL SOCIETY held its annual meeting in December and elected the following officers to serve during 1916: President Dr. E. F. McClendon, Plainview; vice-president, Dr. E. O. Nichols, Plainview; secretary-treasurer, Dr. A. H. Lindsay, Plainview; censors, Drs. W. R. Sanders, J. C. Anderson and L. C. Wayland, Plainview; public health and legislation, Drs. C. C. Gidney, S. J. Underwood and J. F. Owens. The election of a delegate and alternate was postponed until the next regular meeting.

THE POTTER COUNTY MEDICAL SOCIETY met in Amarillo, December 13, 1915. Sixteen members were present. The following officers were elected: President, Dr. A. F. Lumpkin, Amarillo; first vice-president, Dr. W. A. Warner, Claude; second vice-president, Dr. C. L. McClellan, Farwell; secretary-treasurer, Dr. J. J. Crume, Amarillo (re elected); censors, Drs. R. L. McMeans, I. Rascoe and G. T. Vinyard, all of Amarillo; delegate, Dr. S. R. Griffin, Canyon; alternate, Dr. W. A. Warner, Claude.

THE WICHITA COUNTY MEDICAL SOCIETY met December 14, 1915, at Wichita Falls. The following officers were elected: President, Dr. Everett Jones, Wichita Falls; first vice-president, Dr. W. H. Ogden, Electra; second vice-president, Dr. L. P. Amason, Wichita Falls; secretary-treasurer, Dr. Q. B. Lee, Wichita Falls; delegate, Dr. Joe Daniels, Wichita Falls; alternate, Dr. R. L. Hargraves, Wichita Falls. No scientific program was had. A banquet was served at the Metropolitan Cafe after the election of officers.

SAN ANGELO DISTRICT—No. 4.

Dr. S. C. Parsons, San Angelo, Councilor.

District Society.—Dr. J. M. Horn, Brownwood, President; Dr. R. H. Cochran, Coleman, Secretary. Next meeting will be in Brady.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Brown—Dr. J. W. Carson, Brownwood; 2nd Tuesday monthly.

Coleman—Dr. R. Balley, Coleman; 1st Thursday monthly.

Lampasas—Dr. J. W. Ellis, Lampasas; 1st Tuesday March, June, September and December.

McCulloch—Dr. J. S. Anderson, Brady; 1st Monday monthly.

Menard-Kimble—Dr. W. M. Fenley, Menard.

Runnels—Dr. E. R. Middleton, Winters; 2nd Thursday monthly.

Tom Green—Dr. G. W. Nibling, San Angelo; Tuesday before full moon.

THE BROWN COUNTY MEDICAL SOCIETY met in Brownwood, December 14th. Dr. J. W. Carson was received on transfer from the Comanche County Society. The following officers were elected to serve during 1916: President, Dr. H. M. McDaniel, May; vice-president, Dr. M. L. O'Banion, Brownwood; secretary-treasurer, Dr. J. W. Carson, Brownwood; censor, Dr. T. A. Morrison, Grosvenor. Dr. Sherwood of Temple, read a paper on *Pyelitis in Pregnancy.* Visitors at this meeting were Drs. Sherwood of Temple, Smith of Port Bolivar and Shields of Brookesmith.

THE LAMPASAS COUNTY MEDICAL SOCIETY met in Lampasas, December 7th. Three members were present. Officers elected for the ensuing year are: President, Dr. W. D. Biggs, Lometa; vice-president, Dr. Joe E. Dildy, Lampasas; secretary-treasurer, Dr. J. W. Ellis, Lampasas; delegate, Dr. J. D. Dorbandt, Lampasas; censor, Dr. Wm. Lowe, Lometa.

THE TOM GREEN COUNTY MEDICAL SOCIETY met December 21st, in San Angelo. Seventeen members were present. Dr. W. B. Everett, Sterling City, was received on transfer from Hamilton County. The election of officers for 1916 resulted as follows: President, Dr. G. M. Yates, San Angelo; first vice-president, Dr. J. B. Chaffin, San Angelo; second vice-president, Dr. Harlan Horney, San Angelo; secretary-treasurer, Dr. G. W. Nibling, San Angelo, re-elected; delegate, Dr. A. C. DeLong, San Angelo; alternate, Dr. A. W. Clayton, San Angelo. By request, Dr. S. E. Thompson, Carlsbad, read his paper entitled, *Common Sense and the Fever Thermometer vs. the Stethoscope and the Microscope.*

SAN ANTONIO DISTRICT—No. 5.

Dr. W. A. King, San Antonio, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Atascosa—Dr. W. E. Seale, Charlotte; 2nd Tuesday monthly.

Bexar—Dr. W. H. Hargis, San Antonio; from October to May. 1st Thursday, Section on Eye, Ear, Nose and Throat; 2nd Thursday, Section on Medicine; 3rd Thursday, State Medicine, Public and Personal Hygiene; 4th Thursday, Obstetrics and Gynecology.

Comal—Dr. L. G. Wille, New Braunfels; 2nd Saturday quarterly.

Guadalupe—Dr. A. H. Neighbors, Seguin; 1st Tuesday monthly.

Gonzales—Dr. W. T. Dunning, Gonzales; 1st Monday monthly.

Karnes—Dr. R. C. Youngblood, Falls City; bi-monthly.

Kerr-Kendall-Gillespie-Bandera—Dr. Wm. Lee Secor, Kerrville; 1st Monday alternate months.

La Salle-Frio—Dr. R. L. Graham, Cotulla; meets quarterly.

Medina—Dr. J. H. Fletcher, Hondo; 2nd Wednesday monthly.

Uvalde-Edwards—Dr. S. B. Hudson, Sabinal; 1st Tuesday monthly.

Val Verde—Dr. D. A. York, Del Rio; 1st Monday monthly.

Wilson—Dr. J. E. Sparks, Floresville; quarterly.

THE COMAL COUNTY MEDICAL SOCIETY met in regular session in December and elected the following officers for the ensuing year: President, Dr. M. W. Barron, Blanco; vice-president, Dr. R. Wright, New Braunfels; secretary-treasurer, Dr. L. G. Willie, New Braunfels, re-elected; committee on public health and legislation, Drs. M. C. Van de Venter, New Braunfels, E. M. Dunn, Hunter and R. L. Fulcher, Blanco; censors, Drs. A. Garwood, M. C. Hagler and H. Leonards, all of New Braunfels; delegate, Dr. M. W. Barron, Blanco; alternate, Dr. R. Wright, New Braunfels. A motion was adopted that the society join the Fifth and Sixth District Medical Society in a body, and the members were accordingly taxed $1 each for this purpose.

The Guadalupe County Medical Society held its annual meeting December 7, 1915. The following were in attendance: Drs. Anderson, Stamps, Williamson, Poth, Brandenburger and Neighbors. Dr. Brandenburger presented a paper on *La Grippe*, which was well received and discussed.

The election of officers for 1916 resulted as follows: President, Dr. M. B. Brandenburger, Seguin; vice-president, Dr. A. M. Stamps, Seguin; secretary-treasurer, Dr. A. H. Neighbors, Seguin; delegate, Dr. N. A. Poth, Seguin; censors, Drs. C. Williamson, R. L. Knolle and N. A. Poth. A committee was appointed to arrange for the annual banquet. The papers for the next meeting were announced as follows: *Laryngeal Diphtheria*, Dr. R. L. Knolle, and *Pneumonia* by Dr. Neighbors.

The Karnes County Medical Society met at Runge, December 13, 1915. Six members were present. The following officers for 1916 were elected: President, Dr. W. F. Hickle, Kennedy; vice-president, Dr. H. Rushing, Runge; secretary-treasurer, Dr. R. C. Youngblood, Falls City; delegate, Dr. D. Y. Willbern, Runge; alternate, Dr. W. F. Hickle, Kennedy; censors, Drs. S. F. Nave and R. L. Hammock, Kennedy. Dr. C. M. Kent, Kennedy, was elected to membership.

Dr. Hammock reported treating three cases of pellagra by injecting serum drawn from blisters on the patient. One patient died and the other two improved.

The next meeting will be in Kennedy, February 8, 1916.

CORPUS CHRISTI DISTRICT—No. 6.

Dr. W. N. Wardlaw, Corpus Christi, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bee—Dr. E. P. Cayo, Beeville; Monday quarterly.
Cameron—Dr. C. W. Skipper, Westville; 2nd Wednesday monthly.
Hidalgo—Dr. W. R. Dashiell, Mission; 5th day monthly
Jim Wells—Dr. M. J. Perkins, Alice.
Kleburg—Dr. R. L. Mathews, Kingsville.
Nueces—Dr. A. W. Davisson, Corpus Christi; 1st and 3rd Fridays monthly.
Refugio—Dr. Roy T. Goodwin, Sinton.
San Patricio—Dr. L. J. Manhoff, Aransas Pass.
Webb—Dr. E. H. Sauvignet, Laredo; 1st Wednesday monthly.

The Nueces County Medical Society held its annual meeting in December, and reports the following officers elected to serve during 1916: President, Dr. R. H. L. Bibb, Corpus Christi; vice-president, Dr. L. Kaffie, Corpus Christi (re-elected); secretary-treasurer, Dr. A. W. Davisson, Corpus Christi (re-elected); censor, Dr. J. H. Grant, Corpus Christi; delegate, Dr. Harry Heaney, Corpus Christi; alternate, Dr. T. J. Turpin, Corpus Christi.

District Personal.—Dr. Albert J. Caldwell, Corpus Christi, has removed to San Antonio, where he will continue to limit his practice to diseases of the eye, ear, nose and throat.

AUSTIN DISTRICT—No. 7.

Dr. T. J. Bennett, Austin, Councilor.

District Society—Dr. Z. T. Scott, Austin, President; Dr. W. A. Harper, Austin, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bastrop—Dr. P. Chapman, Smithville; 2nd Tuesday bimonthly.
Burnet—Dr. H. S. Garrett, Bertram.
Caldwell—Dr. Edgar Smith, Lockhart; 2nd Tuesday monthly.
Hays—Dr. P. J. Shaver, San Marcos.
Lee—Dr. C. S. Gates, Giddings; 1st Monday in March, June, September and December.
Llano—Dr. C. F. Darnall, Llano; 2nd Tuesday monthly.
San Saba—Dr. C. L. Behrns, Cherokee; 2nd Tuesday each month.
Travis—Dr. Edgar Mathis, Austin; 2nd Thursday monthly.
Williamson—Dr. W. G. Pettus, Georgetown; 2nd Wednesday.

The Lee County Medical Society held its annual election of officers in December and reports the following results: President, Dr. R. H. Womack, Lexington; secretary-treasurer, Dr. C. S. Gates, Giddings; delegate, Dr. C. S. Gates. Meetings during 1916 will be held quarterly, the first Monday in March, June, September and December.

The Travis County Medical Society held its annual meeting December 9th. Members present were, Drs. Stroburg, Hilgartner, Lacey, Murray, Suehs, Bennett, Gibson, Watt, Clark, Carrington, T. O. Maxwell, F. A. Maxwell, Preston, Pettway, Key, Beverly, Haigler, J. W. McLaughlin, Graves, Joe Gilbert, Hill, Smartt, Thorne, Decherd, Scott, Nichols, Lightfoot and Edgar Mathis. Three visitors were present.

The retiring president, Dr. Nichols, read his annual address, a strong paper regarding the work of the society and some of its needs. It was favorably received. Reports of officers and committees were read and accepted. The election of officers resulted as follows: President, Dr. Joe Wooten, Austin; vice-president, Dr. Geo. P. Smartt, Manor; secretary-treasurer, Dr. Edgar Mathis, Austin; censor, Dr. A. F. Beverly, Austin; delegate, Dr. S. E. Hudson, Austin; alternate, Dr. J. W. McLaughlin, Austin. All the new officers were called upon in turn and addressed the society, pledging their best efforts to the work. Dr. Preston, by request, read a short, spicy paper on the subject of *Fits*, which showed him to be "some poet" as well as "some fit doctor." Dr. Hilgartner then told several witty stories which contributed materially to the fraternal spirit of the meeting. Following a report of the board of censors, Drs. Alberto Garcia and Wm. E. Watt were elected to membership.

There being no further business or papers before the society, and a nice lunch waiting on a nearby table, a motion to adjourn was made and *almost* carried.

The Williamson County Medical Society met in Georgetown, December 16, 1915. The following were present: Drs. Bennett and Mathis, Austin; H. Feaster, Coupland; J. I. Collier, Taylor; J. H. Vaughan, Liberty Hill; Atkinson, Florence; D. M. Cooke and C. C. Foster, Granger; G. W. Foster, G. E. Henschen, W. H. Moses, B. Nowlin, S. S. Martin and W. G. Pettus, all of Georgetown.

Dr. Edgar Mathis read a paper on *Congenital Umbilical Hernia*, which was discussed by Drs. Bennett, Vaughan and Nowlin.

Dr. Bennett made some valuable suggestions on the duties of delegates to the State Association meetings.

The annual election of officers resulted as follows: President, Dr. J. H. Vaughan, Liberty Hill; vice-president, Dr. G. W. Foster, Georgetown; secretary-treasurer, Dr. W. G. Pettus, Georgetown; delegate, Dr. J. I. Collier, Taylor; alternate, Dr. C. C. Foster, Granger; censor, Dr. W. H. Moses, Georgetown.

The Georgetown physicians were hosts at a dinner served at The Alcove, for members of the society. The invited guests were Judge Richard Critz, County Commissioner Joe N. May and Mr. Wm. Dunks, Georgetown.

DEWITT DISTRICT—No. 8.

Dr. Walter Shropshire, Yoakum, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Colorado—Dr. W. G. Youens, Colorado; 2nd Wednesday February, April, June, August, October and December.
DeWitt—Dr. B. J. Nowierski, Yorktown; 3rd Wednesday monthly.

Fayette—Dr. C. M. Hoch, LaGrange.
Lavaca—Dr. Walter Shropshire, Yoakum; 2nd Tuesday monthly.
Matagorda—Dr. S. A. Foote, Bay City; 2nd Wednesday monthly.
Victoria-Calhoun—Dr. F. L. Sargeant, Victoria; 20th monthly.
Wharton-Jackson—Dr. W. B. Huey, El Campo; 3rd Friday monthly.

THE DEWITT COUNTY MEDICAL SOCIETY met at Cuero, December 15, 1915. There were eleven members present.

Dr. Curtis made a final report on a case which he reported at a previous meeting.

Drs. Reuss and O'Quin reported a case of vaginal atresia.

Dr. Burns reported a case of severe repeated attacks of obscure abdominal pain. In this case, it was found upon operating that there was an acute twist in the gastro colon and mesentery of the small intestines, due to a high Meckel's diverticulum.

Dr. Eckhardt reported a case of rectal polypus in a child.

A motion was carried that the President appoint two members at each meeting to present a synopsis of the new ideas and other interesting matter read by them during the month in certain medical journals, and report at the following meeting. Dr. Eckhardt was appointed to review *The Journal of the A. M. A.*, and Dr. Curtis the *Southern Medical Journal.*

The following resolution, as a protest against fraudulent nostrums, was approved and placed on record in the minutes of the Society.

WHEREAS, The DeWitt County Medical Society is in sympathy with the effort of the United States Government and Post Office Department, in their attempt to eliminate the sale, manufacture and advertisement of all fraudulent, so-called medical preparations and devices which are detrimental to the health of the credulous who use them, and

WHEREAS, The DeWitt County Medical Society is in accord with all medical organizations, boards of health, and publications which are making attacks on the manufacture, sale and advertisement of harmful proprietary preparations,

THEREFORE, BE IT RESOLVED, That we unanimously aprove the campaign now in progress by *The Journal of the American Medical Association, Southern Medical Journal, Harper's Weekly,* and other publications and newspapers, the Louisiana State Board of Health, and the work of the Honorable Samuel Hopkins Adams, and pledge to these efforts our earnest and active support, in hope that this evil may be controlled and ultimately eliminated.

The following were elected to serve as officers for 1916: President, Dr. J. W. Burns, Cuero; vice-president, Dr. H. C. Eckhardt, secretary-treasurer, Dr. B. J. Nowierski, Yorktown (re-elected); censors, Drs. R. Westphal, J. M. Lackey and A. Beckmann; delegate, Dr. G. W. Allen; alternate, Dr. J. M. Lackey.

The society adjourned to meet the 3rd Wednesday in January

SOUTHERN DISTRICT—No. 9.
Dr. W. W. Ralston, Houston, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Austin—Dr. Otto E. Steck, Bellville; 1st Tuesday quarterly.
Brazos—Dr. R. J. Hunnicutt, Bryan.
Brazoria—Dr. A. J. Pollard, Alvin; 1st Thursday after 1st Monday.
Burleson—Dr. T. L. Goodnight, Caldwell.
Fort Bend—Dr. R. M. Munroe, Richmond.
Galveston—Dr. M. L. Graves, Galveston; last Friday monthly.
Grimes—Dr. E. A. Harris, Navasota; 1st Wednesday monthly.
Harris—Dr. G. C. Lechenger, Houston; every Friday night.
Madison—Dr. J. E. Morris, Madisonville; last Tuesday monthly.
Montgomery—Dr. H. W. Earthman, Conroe; 2nd Monday monthly.
Waller—Dr. R. E. Bing, Waller; 1st Monday quarterly.
Walker—Dr. J. W. Thomason, Huntsville; 2nd Tuesday bi-monthly.
Washington—Dr. R. H. Lenert, Brenham; quarterly.

THE HARRIS COUNTY MEDICAL SOCIETY reports the following officers elected to serve during 1916: President, Dr. J. Allen Kyle, Houston; vice-president, Dr. W. G. Priester, Houston; secretary-treasurer, Dr. G. C. Lechenger, Houston.

DISTRICT PERSONAL.—Mrs. H. C. Cooke, mother of Dr. E. F. Cooke, Houston, died December 5, after a long illness. She had lived in Houston 15 years, and until her illness was an active church worker.

SOUTHEASTERN DISTRICT—No. 10.
Dr. A. R. Sholars, Orange, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Hardin—Dr. Lee Selman, Olive; last Saturday monthly.
Jasper-Newton—Dr. D. McMicken, Kirbyville; 4th Wednesday quarterly.
Jefferson—Dr. B. P. Holland, Beaumont; 1st Monday monthly.
Nacogdoches—Dr. T. J. Blackwell, Nacogdoches; 2nd Wednesday monthly.
Orange—Dr. J. P. Hewson, Orange; 1st Tuesday monthly.
Polk—Dr. T. H. Bates, Camden; 1st Wednesday monthly.
Sabine—Dr. W. T. Arnold, Jr., Hemphill; 2nd Wednesday monthly.
Shelby—Dr. J. H. Windham, Shelbyville; 2nd Tuesday monthly.

THE ORANGE COUNTY MEDICAL SOCIETY held its annual meeting December 7, in Orange. The following officers were elected to serve during 1916: President, Dr. J. E. Reeves, Orange; vice-president, Dr. A. G. Pearce, Orange; secretary-treasurer, Dr. J. P. Hewson, Orange; delegate, Dr. W. P. Coyle, Orange; alternate, Dr. J. P. Hewson; censors, Drs. R. H. Jourdan, C. E. Phillips and J. D. Yates. Dr. W. Burton Thorning, Houston, read a paper on *Treatment and Diagnosis of Acute Osteomyelitis;* Dr. Yates read a paper on *Laceration of the Female Perineum.*

EASTERN DISTRICT—No. 11.
Dr. C. C. Nash, Palestine, Councilor.

District Society—Dr. E. B. Parsons, Palestine, President; Dr. E. H. Vaughn, Tyler, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Anderson—Dr. E. B. Parsons, Palestine; 1st Monday monthly.
Angelina—Dr. J. C. Van Nuys, Lufkin; 1st Tuesday monthly.
Cherokee—Dr. T. H. Cobble, Rusk; 4th Tuesday monthly.
Freestone—Dr. E. V. Headlee, Teague; 1st Tuesday monthly.
Henderson—Dr. A. H. Easterling, Athens; 1st Mondays.
Houston—Dr. W. W. Latham, Crockett; 2nd Tuesday monthly.
Leon—Dr. D. C. Carrington, Marquez; 1st Tuesday in April; 2nd Tuesday in October.
Panola—Dr. A. M. Baker, Carthage.
Rusk—Dr. W. P. White, Henderson; 2nd Tuesday quarterly.
Smith—Dr. Hubert Ferrell, Tyler; 2nd Tuesday monthly.
Trinity—Dr. W. H. Pope, Jr., Trinity; 3rd Thursday monthly.

THE SMITH COUNTY MEDICAL SOCIETY met in Tyler, December 14. Ten members were present. The following officers were elected to serve during 1916: President, Dr. E. H. Vaughn, Tyler; vice-president, Dr. G. G. Bell, Tyler; secretary-treasurer, Dr. Hubert Ferrell, Tyler; censors, Drs. H. H. Wisdom, B. F. Bell and B. F. Chambers.

The following papers were presented. *Intravenous Injection of Quinin in Malaria,* Dr. B. F. Bell;

Report of a Case of Estivo-Autumnal Malaria, With Coma, Dr. Albert Woldert.

CENTRAL DISTRICT—No. 12.
Dr. A. C. Scott, Temple, Councilor.

District Society—H. C. Black, President; Dr. H. F. Connally, Waco, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bosque—Dr. C. C. Cate, Morgan; 1st Wednesday.
Bell—Dr. L. R. Talley, Temple; 1st Wednesday quarterly.
Comanche—Dr. Charles Ory, Comanche; 1st Thursday monthly.
Coryell—Dr. Ed. Graves, Gatesville; last Wednesday bi-monthly.
Erath—Dr. S. D. Naylor, Stephenville; 2nd Wednesday bi-monthly.
Falls—Dr. Aug. Streit, Marlin; 1st and 3rd Mondays.
Hamilton—Dr. J. B. Winn, Hamilton; 2nd Wednesday monthly.
Hill—Dr. J. E. Boyd, Hillsboro; 2nd Friday.
Hood-Somervell—Dr. G. D. Ross, Paluxy; Wednesday before the full moon.
Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.
Limestone—Dr. M. M. Brown, Mexia; 3rd Thursday bi-monthly.
Milam—Dr. Elbra Munroe, ————; 2nd Tuesday bi-monthly.
McLennan—Dr. C. E. Collins, Waco; 1st Tuesday.
Navarro—Dr. E. H. Newton, Corsicana; 1st Monday.
Robertson—A. J. Sharp, Franklin; 2nd Tuesday bi-monthly.

THE BELL COUNTY MEDICAL SOCIETY met December 1st, at Temple. Forty-five members were in attendance. A screen lecture on the *Preparation of Antitoxins*, was given by Dr. Crum of Parke, Davis & Company; a paper on *Diphtheria* was read by Dr. S. A. Watts, Pendleton. A general discussion of the relation of the medical profession to the Industrial Accident Insurance companies, was had, with an unanimous sentiment against adopting the "canned" contracts as sent out by these companies for physicians to sign.

The following officers were elected to serve during the ensuing year: President, Dr. M. P. Smartt, Eddy; vice-president, Dr. J. A. Odom, Rogers; secretary-treasurer, Dr. L. R. Talley, Temple (re-elected); censor, Dr. A. H. Alsup, Little River; delegate, Dr. J. S. McCelvey, Temple; alternate, Dr. G. S. McReynolds, Temple.

THE HAMILTON COUNTY MEDICAL SOCIETY met in Hamilton in December, and elected the following officers to serve during the coming year: President, Dr. M. A. Boone, Hamilton; vice-president, Dr. J. D. Currie, Hico; secretary-treasurer, Dr. J. B. Winn, Hamilton; censor, Dr. J. H. Wysong, Hico. Papers were read by Drs. Currie and Winn, and discussed by all present. The retiring president, Dr. C. E. Durham delivered his annual address on *The Work Done by the Society During* 1915.

THE MCLENNAN COUNTY MEDICAL SOCIETY met December 9, 1915, at the Huaco Club, Waco. Sixty were in attendance. The following officers were elected: President, Dr. Doyle L. Eastland, Waco; vice-president, Dr. C. W. Davis, Waco; secretary-treasurer, Dr. C. E. Collins, Waco; censor, Dr. C. H. Brooks, Waco; delegates, Drs. J. M. Witt and H. F. Connally, Waco; alternates, Drs. H. R. Dudgeon and J. L. Burgess, Waco.

Following the business session adjournment was made to the banquet hall, where a most tempting banquet was served. Dr. S. E. Shelton, a pioneer member of the society, was toastmaster. Dr. H. T. Aynesworth, retiring president, read his annual address, in which he reviewed the activities of the past year. He said that the past year had proven the most successful period in the history of the organization, and was the result of co-operation by the membership. The following toasts were given: *History of McLennan County Medical Society*, Dr. J. T. Harrington; *Surgery: Past, Present and Future*, Dr. J. W. Hall, Waco; *The Reveries of a Country Doctor*, Dr. W. P. Connally, McGregor; *Better Babies Contests*, Dr. S. C. Gage, Waco; *Ups and Downs in the Practice of Medicine*, Dr. E. L. Wedemeyer, Mart; *To Those Who Have Joined the Silent Majority*, Dr. H. C. Black. This toast was drunk in cold water, standing. Visitors who addressed the society were Drs. S. P. Rice, Marlin; M. W. Sherwood, Temple; N. D. Buie, Marlin; Frank Shaw, Marlin; W. B. Halley, Ballinger and Hon. O. L. Stribling, Waco. Dr. H. C. Black related in his own inimitable way two stories, as his contribution to the program.

When the speech making was ended, cabaret features consisting of songs and dances, were furnished. These were far above the ordinary. Music was furnished by Gladden's orchestra. The committee which arranged the banquet was: Drs. H. F. Connally, W. L. Crosthwaite, M. W. Colgin, Paul C. Murphy and Carl Lovelace.

THE MILAM COUNTY MEDICAL SOCIETY met in Cameron in December. Twenty members and visitors were present. The annual election of officers resulted as follows: President, Dr. G. B. Taylor, Cameron; vice-president, Dr. W. R. Newton, Cameron; secretary-treasurer, Dr. Elbra Munroe, ————; censors, Drs. Coulter, Rockdale, L. L. Lee, Thorndale; delegate, Dr. Reisher, Cameron; alternate, Dr. A. S. Epperson, Cameron. The following papers were read: *Symptomatic Diseases as a Disturbance to the Eye*, Dr. G. B. Taylor, Cameron; *Malaria and Report of Cases*, Dr. A. S. Epperson, Cameron; *Practical Treatment of Syphilis*, Dr. N. D. Buie, Marlin; *Infectious Arthritis*, Dr. J. W. Torbett, Marlin. All papers were heartily discussed.

A vote of thanks was given the visitors for their contributions to the program. The society adjourned and the visitors were escorted to the Auditorium Hotel where a tempting banquet was awaiting them. The next meeting will be in Cameron.

THE NAVARRO COUNTY MEDICAL SOCIETY met December 6th, at Corsicana. The Secretary presented a condensed report of the year's work, which was very gratifying to the members. Not one regular session was missed during the year, and never did the society fail to have a profitable meeting. The following officers were elected to serve during 1915: President, Dr. W. D. Cross, Corsicana; vice-president, Dr. W. D. Fountain, Corsicana; secretary-treasurer, Dr. E. H. Newton, Corsicana; delegate, Dr. T. A. Miller, Corsicana; alternate, Dr. L. E. Kelton, Corsicana; censors, Drs. Dubart Miller, Corsicana, and J. A. Daniel. The society adjourned to the Main Hotel for a banquet, given by the society to the members and their wives.

DISTRICT PERSONAL.—Dr. Doyle L. Eastland, Waco, was recently commissioned first lieutenant in the Medical Reserve Corps, U. S. Army. He has been attached to the engineering corps of the army for the past three years, as surgeon.

NORTHWESTERN DISTRICT—No. 13.
Dr. C. B. Williams, Mineral Wells, Councilor.

District Society—Dr. J. H. Eastland, Mineral Wells, President; Dr. R. A. Duncan, Graham, Secretary. Next meeting will be in Seymour, April 11-12, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Baylor—Dr. C. E. Johnson, Seymour; 2nd Tuesday.
Clay—Dr. B. M. Puckett, Henrietta; 2nd Wednesday.
Eastland—Dr. T. B. Busby, Rising Star; quarterly.
Parker-Palo Pinto—Dr. E. A. Davis, Mineral Wells; 2nd Tuesday monthly.
Stephens—Dr. J. H. Ball, Crystal Falls; 1st Tuesday quarterly.
Throckmorton—Dr. D. C. Wylie, Throckmorton.
Young—Dr. W. H. Logan, Graham; 2nd Tuesday bi-monthly.

THE EASTLAND COUNTY MEDICAL SOCIETY met in Cisco, December 14th. Thirteen members were pres-

ent. Dr. K. M. Stell of Romney, was elected to membership. The society will meet quarterly instead of bi-monthy, during 1916. The officers elected are as follows: President, Dr. Thos. Patterson, Rising Star; vice-president, Dr. K. M. Stell; secretary-treasurer, Dr. T. B. Busby, Rising Star; censors, Drs. W. H. Guy and G. T. Black. The regular program was rendered as follows: *Lumbago*, by Dr. T. L. Pierce, Carbon; *Vaccines in Typhoid Fever*, by Dr. Thos. Patterson, Rising Star; *Pneumonia*, by Dr. Jos. W. Gregory, Cisco. This was a very interesting and successful meeting.

District Personal.—Dr. C. B. Gant, Graham, is taking post-graduate work in New Orleans. From New Orleans he will go to Harvard, where he will remain several months.

NORTHERN DISTRICT—No. 14.

Dr. A. W. Carnes, Hutchins, Councilor.

District Society—Dr. C. R. Johnson, Gainesville, President; Dr. H. L. Moore, Dallas, Secretary.

Secretaries of Sections—Obstetrics and Gynecology, Dr. F. A. Pierce, Dallas; Medicine, Dr. J. D. Burt, Farmersville; Surgery, Dr. J R. Lewis, Gainesville.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Collin—Dr. E. L. Burton, McKinney; 2nd Tuesday.

Cooke—Dr. J. R. Lewis, Gainesville; 2nd Tuesday.

Dallas—Dr. R. S. Loving, Dallas; 2nd and 4th Thursdays.

Delta—Dr. C. C. Taylor, Cooper; 1st Monday.

Denton—Dr. W. G. Kimbrough, Denton; Tuesday following 1st Monday.

Ellis—Dr. E. F. Gough, Waxahachie; 2nd Tuesday.

Fannin—Dr. E. H. H. Foster, Bonham; 2nd Thursday monthly.

Grayson—Dr. Davis Spangler, Sherman; 1st Tuesday.

Hopkins—Dr. T. K. Proctor, Sulphur Springs; 1st Wednesday.

Hunt—Dr. H. M. Bradford, Greenville; 2nd Tuesday.

Kaufman—Dr. B. J. Hubbard, Kaufman; 1st Tuesday, February, April, June, August, October and December.

Lamar—Dr. W. W. Fitzpatrick, Paris; 1st Thursday.

Montague—Dr. C. F. Young, Bowie; 2nd Tuesday monthly.

Tarrant—Dr. J. J. Richardson, Fort Worth; 1st and 3rd Fridays.

Van Zandt—Dr. D. L. Sanders, Wills Point; 1st Friday.

Wise—Dr. L. H. Reeves, Decatur; 3rd Tuesday each month.

The Collin County Medical Society met at McKinney, December 14, 1915, with a good attendance. The secretary's report with recommendations, was read and unanimously adopted. The president read a paper which was both unique and entertaining. The following officers were elected for the ensuing year: President, Dr. J. C. Erwin, McKinney; vice-president, Dr. W. T. Largent, McKinney; secretary-treasurer, Dr. E. L. Burton, McKinney (re-elected); censors, Drs. J. E. Gibson, J. W. Largent and W. E. Rucker; delegate, Dr. B. F. Largent; alternate, Dr. J. C. Erwin; health and sanitation committee, Drs. J. E. Gibson, Chairman, W. E. Rucker, W. S. Wysong, J. D. Burt, Farmersville, M. O. Perry, Allen, T. G. Bates, Anna, E. L. Hailey, Celina, W. R. Mathers, Prosper, P. F. Brooks, Wylie and J. N. Mendenhall, Plano. Adjourned to meet the second Tuesday in January, at the home of Dr. E. L. Burton.

The Dallas County Medical Society met December 9, and elected the following officers for 1916: President, Dr. S. E. Milliken, Dallas; vice-president, Dr. J. T. Watson, Dallas; secretary-treasurer, Dr. R. S. Loving, Dallas (re-elected); delegates, Drs. C. M. Rosser and W. A. Boyce, Dallas; alternates, Drs. J. H. Black and A. B. Small, Dallas; censors, Drs. F. B. Morgan, W. T. Baker and W. B. Carroll; executive body, Drs. A. W. Nash, O. M. Marchman, H. B. Decherd, W. R. Blailock, J. M. Martin, A. Wilkinson, R. W. Baird and J. B. Smoot. The president, vice-president and secretary-treasurer, are *ex-officio* members of this body.

The Dallas County Medical Society met in regular session December 23rd at Baylor Medical College, Dallas. There were no clinical cases reported. Dr. Scurry L. Terrell presented some very interesting lantern slides, and made a descriptive talk of his experiences in the British Hospital Service near the firing line in Northern France. Dr. Crum of Parke, Davis & Company, delivered an illustrated lecture on *Manufacture of Antitoxic Serae*. Dr. A. W. Carnes offered an amendment to Chapter II, Section 2, of the by-laws, to read as follows:

> The Program Committee shall provide for a clinic day, to be held the third Tuesday of each month, the place of meeting to be the Parkland Hospital in the forenoon, and the other local hospitals in the afternoon. All reputable physicians shall be invited to attend and present cases of interest.

The Ellis County Medical Society met December 6, and elected the following officers to serve during 1916: President, Dr. Z. N. Thornton, Forrester; vice-president, Dr. F. H. Jenkins, Italy; secretary-treasurer, Dr. E. F. Gough, Waxahachie (re-elected); delegate, Dr. J. C. Loggins, Ennis; alternate, Dr. C. W. Simpson, Waxahachie.

The Fannin County Medical Society reports the following officers elected for 1916: President, Dr. J. E. Norman, Trenton; vice-president, Dr. J. E. Nevill, Bonham; secretary-treasurer, Dr. E. H. H. Foster, Bonham (re-elected); censor, Dr. A. B. Kennedy, Bonham.

The Grayson County Medical Society met December 6, 1915, at Sherman.

Dr. J. B. Stinson presented a patient, negress, who had a mutilocular cyst. The cyst arose from the left mastoid process and involved all that side of her neck. There was a history of trauma at this particular spot some 18 years previous. The growth began as a small pea shaped nodule behind the ear and has grown rapidly only in the last two years. No pain or tenderness. Diagnosis: Multilocular cyst arising from mastoid process—most probably benign. The diagnosis and treatment were discussed by Drs. R. May, J. G. Ellis, Jr., H. L. Brown, M. M. Morrison, T. W. Crowder, D. Spangler and O. C. Ahlers. All advised operative interference.

Dr. R. May read a paper on *The Relation of the Physician to his Patient.* His main plea was for honesty to patients. Give them the very best you have, both in diagnosis and treatment. Use opiates sparingly. He said, "advise your patients as though they were members of your family—as they really should be regarded." The discussion was by Drs. O. C. Ahlers, E. E. Holland, J. G. Ellis, Jr., C. E. Schneck, M. M. Morrison, J. B. Stinson, D. Spangler and Dr. May.

Dr. J. G. Ellis, Jr., reported two cases he had operated on under spinal anaesthesia; one a suprapubic prostatectomy in a man 71 years old; the other a panhysterectomy for carcinoma of the cervix uteri, on a patient whose heart was so badly diseased as to contra-indicate a general anaesthetic. Both patients were recovering at the time of the report.

The officers for the ensuing year were then elected, as follows: President, Dr. O. C. Ahlers, vice-president, Dr. A. B. Gardner, Denison (re-elected); secretary-treasurer, Dr. D. Spangler, Sherman, (re-elected); delegate, Dr. M. M. Morrison, Denison; alternate, Dr. R. May, Whitewright; censor, Dr. F. M. Teas, Denison.

The Hopkins County Medical Society met in regular session December 1, 1915: Eight members and two visitors were present. Dr. T. K. Proctor was received by transfer from the Tom Green

County Medical Society. Election of officers for 1916, resulted as follows: President, Dr. Earl Stirling, Sulphur Springs; vice-president, Dr. S. B. Longino, Sulphur Springs; secretary-treasurer, Dr. T. K. Proctor, Sulphur Springs; censor, Dr. J. J. Johnson.

The Hunt County Medical Society met December 13, at Greenville. The following officers were elected for 1916: President, Dr. C. L. Gregory, Greenville (re-elected); vice-president, Dr. E. A. Hopkins, Wolfe City; secretary-treasurer, Dr. H. M. Bradford, Greenville; delegate, Dr. A. S. McBride, Greenville; alternate, Dr. C. E. Cantrell, Greenville.

A committee, consisting of Drs. C. E. Cantrell, W. M. Dickens and B. F. Arnold, presented the following resolutions, which were adopted:

Whereas, The American Medical Association, under the new organization, in which it is composed of units of State Associations, which, in turn, are composed of county societies, departed in many ways from former principles of organization; first, in taking legalized practitioners of all schools of medicine who would renounce their belief in dogmatic theories; second, in publishing in the lay press facts about medicine concerning the public, and over which there could be no discussion or difference of opinion, giving in detail the methods to be pursued in giving such articles or knowledge to the press and,

Whereas, The Texas Surgical Society, which is composed only of surgeons doing surgery exclusively, and which is not a part of the plan of organization of the American Medical Association, but whose members are members of county societies and the State Association, making them, in fact, an auxiliary society of the State Association, which connection would give them ample right to apply to the State Association or to county societies for the privilege of publishing any article that they might deem proper to publish, has, by the action of the said Texas Surgical Society, published their President's address in the lay press of this county without consulting the publicity committee of the county society, and,

Whereas, Said address contains things which concern the whole profession, and with which we believe a majority of our members do not agree;

First, because the address itself, when published in the lay press, is couched in such language that it might be taken as advertising the fact that some physicians are doing surgery exclusively, so much so that some of our more careful journalists have refused to publish the article, except as paid advertising;

Second, we do not believe the time has come in America when surgery and surgical procedure can or should be separated from medicine, and in view of the fact that all practitioners of medicine are educated in surgery and licensed to practice surgery in this State, at the same time that they are licensed to practice medicine, and that the only good, sound reason for a physician limiting his practice to surgery, that his own work is sufficiently good to bring him surgical cases in such numbers that he will have no time to devote to people suffering from other than surgical diseases, and that such teaching, coming from those in high positions, is misleading to the people, and that, if they could be led to believe such teaching, it would place the people beyond the reach, many times, of competent service in view of the fact that so far as we know there is but one surgeon in this State who is paid sufficient salary to enable him to devote all of his time to surgery alone:

Third, while we agree with the Texas Surgical Society, and its President, that a division of fees between a general practitioner and a man who does surgery is reprehensible and cannot be too strongly condemned, and that the general practitioners of America have done quite as much to call attention to this as the surgeons themselves, we do not believe that the teaching should go forth unquestioned that it is wrong for a physician who is qualified to do surgery to earn a surgical fee just because he visits people suffering with other diseases than surgical diseases;

Fourth, we do not believe that the President of the Texas Surgical Society and its members, fully understood the intention of the Council on Medical Education, when it undertook to publish in the lay press an article that would indicate that the American Medical Association was bringing charges against people who have tried to supply the needs of the unfortunate of their communities, and discussion of this subject before the people, while the American Medical Association is still performing its work, is not justifiable, in view of the fact that there is still room for discussion as a matter yet peculiarly within the province of the whole profession;

Fifth, we do not agree with the Texas Surgical Society in the belief that church societies and philanthropic individuals, have usually invested their money in hospitals for the purpose of making dividends. We believe that it should be beneath the dignity of any physician who has been so fortunately situated as to have the State furnish an institution properly equipped for his work, to undertake to cast reflection on any community, church or individual, who would undertake to supply their physicians with better facilities for doing surgical operations or caring for the sick, than the ordinary home furnishes;

Sixth, we believe that the Texas Surgical Society, and its President, showed very bad taste in going into the public prints and criticizing members of the profession who are presumed to be doing acceptable surgery, and that instead of enlightening the people and clearing up the situation, they have clouded the atmosphere with the doubtful criticism that a majority of the general practitioners operating are doing "sloppy work," undertaking to argue the question before the people, who are not capable of drawing the distinction between good or bad work—in fact, all surgical procedure to those who do not understand the necessities, might appear "sloppy." Therefore, believing this question should be settled within the profession and not before the public, and that the Texas Surgical Society has exceeded its ethical rights,

Be it Resolved, That we most heartily condemn the publication of this article in the lay press of this county without first referring the question to the county society.

The Kaufman County Medical Society met in annual meeting at Kaufman, December 7, with thirteen members and two visitors present—despite the rain.

According to the report of the secretary, there was a balance of $187.30 in the treasury, December 1, 1914. Among the receipts, there was one item of $11.40 for interest, which attracted attention. The disbursements, after deducting $3.50 for last year's accounts, were only $66.22 for running expenses of the society. The society pays from its funds for the dinners of its members and visitors on meeting days, and it bought a cane for one of its members. These two items cost $51.32, leaving $14.90 as the amount paid for printing, stationery and postage. No dues except the per capita assessment for the State Association, were collected for 1915 and none will be collected for 1916. Balance in the treasury, December 1, 1915, $125.98.

The statistical report shows that the society has 44 members, two from outside of the county; physicians in the county suspended for non-payment of dues, 3; paid up and withdrawn, 2; never were members of the society, 3; retired, 4; members of other county societies, 2; negro physicians, 3. Deaths during the year, Dr. L. M. Stroud, Terrell, November 16; Dr. L. W. Sparks (negro), murdered July 13.

Officers elected for 1916: President, Dr. B. C. Andrews, Mabank; vice-president, Dr. T. M. Jarmon, Terrell; secretary-treasurer, Dr. B. J. Hubbard, Kaufman (re-elected for the tenth consecutive year); censors, Drs. W. J. Pollard, Kaufman, and W. H. Monday, Terrell; delegate, Dr. B. J. Hubbard.

The subjects discussed were *Pellagra, Pernicious Vomiting of Pregnancy* and *La Grippe.* Final reports of cases reported during the year were heard.

Dr. Fowler reported a very interesting case of a girl, age 7. He first saw her some weeks ago. Mother had noticed a nasal twang to her voice and a difficulty in swallowing several days previous. Her teacher had noticed the voice and some nervous symptoms earlier. She was apparently well but awkward in movements, stumbling and nervous. Had always had good health and was mentally bright. No sickness recently, no rise of temperature. Saw her each day and noticed the progress of the affection. Facial expression changed, seemed more relaxed; mental appearance dulled; right side of face affected more than left; tongue, when protruded, bent to the right; grip impaired but to the same extent in each hand; unsteady gait. The third visit found all symptoms more pronounced and they have continued until now; eyes are crossed; cannot

understand a word she attempts to utter; cannot stand alone; bladder works very slowly, several attempts being necessary to void urine. A general paresis is coming gradually and rapidly, that no treatment has relieved. No history of any contagious disease recently, no fever, no pain, no sore throat. Diagnosis for want of a better term, is given as general infantile paralysis.

Next meeting will be held in Terrell on the second Tuesday in February.

THE TARRANT COUNTY MEDICAL SOCIETY met December 5, 1915. Dr. M. L. Talbot made a motion that the society publish an advertisement in the daily papers entitled *A Disease That Ought to be Cured*, the ad being in the nature of a plea to the laity to pay doctor bills. After much discussion, a committee consisting of Drs. Talbot, Holman Taylor and S. A. Woodward, was appointed to consider the advisability and feasibility of running such an ad by the society, to report at the next meeting.

A Committee was appointed to investigate the condition of a physician in the County Poor House, who was thought to be worthy of assistance, which was reported by Dr. Talbot. Dr. Holman Taylor spoke of a committee of the State Association which is to consider the matter of caring for indigent physicians, and suggested that co-operation of this committee be asked.

Dr. R. H. Gough announced that the City Relief Association had requested physicians to keep a record and report to it the names of patients treated and number of visits made, in all charity work.

The reports of the secretary and treasurer were read and accepted. The officers elected for 1916 are: President, Dr. C. O. Harper, Fort Worth; vice-president, Dr. W. L. Allison, Fort Worth; secretary, Dr. Jas. J. Richardson, Fort Worth (re-elected); treasurer, Dr. W. R. Thompson, Fort Worth (re-elected); censor, Dr. L. A. Suggs, Fort Worth; delegate, Dr. J. H. McLean, Fort Worth; alternate, Dr. K. V. Kibbie.

THE TARRANT COUNTY MEDICAL SOCIETY met December 17, 1915. The retiring President, Dr. J. A. Gracy, made a short talk. He was present and on time at each of the twenty-four meetings held during the year. Dr. Dorris, Grapevine, presented a patient, a girl 3 years old, who had been a healthy child until last October, when she began having chills. These were stopped by anti-malarial treatment in a short time. Following the attack of chills her abdomen began to enlarge and continued to grow rapidly. Two weeks ago it was tapped, only a small amount of straw colored fluid was obtained, without any reduction in the size of the abdomen. At present the abdomen is very large, with tumefaction extending from the costal arch to the crest of the ilium. The patient is very emaciated and has every sign of progressive malignancy. The case was discussed by Drs. Harris, Chase, W. L. Allison and Harper, who all agree on a diagnosis of carcinoma. Dr. Chase advised the use of the *x*-ray and cited similar cases he had seen which were benefited by this treatment.

The society indorsed the resolution adopted by the Southern Medical Association regarding the increase in the Medical Staff of the United States Army. The secretary was instructed to send a copy of the resolutions to Texas Senators and Congressmen, at Washington.

Dr. A. W. Carnes, Councilor, made a short address, in which he praised the society for the work it had done and is doing for the betterment of the profession and organized medicine.

Dr. C. R. Johnson, Gainesville, President of the North Texas Association and vice-councilor of the district, discussed his plans for the year. He hopes to rid the district of quack and fake medical advertising in the daily and weekly newspapers, by securing for the papers equivalent advertising of a better class. He believes the press would prefer to be honest, but that such deviation as that under consideration is allowed from necessity, the revenue being essential to continued existence in many instances.

NORTHEASTERN DISTRICT—No. 15.

Dr. W. H. Blythe, Mt. Pleasant, Councilor.

District Society—Dr. R. Y. Lacy, Pittsburg, President; Dr. J. N. White, Texarkana, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bowie—Dr. E. M. Watts, Texarkana; 4th Friday.
Camp—Dr. R. Y. Lacy, Pittsburg; 1st Wednesday.
Cass—Dr. J. T. Herndon, Linden; 1st Wednesday.
Franklin—Dr. Z. C. Fuquay, Mount Vernon; 1st Tuesday.
Gregg—Dr. W. D. Northcutt, Secretary.
Harrison—Dr. J. B. Baldwin, Marshall; 1st Tuesday.
Marion—Dr. S. A. Miller, Jefferson; 1st Thursday monthly.
Morris—Dr. R. C. Farrier, Omaha; 1st Tuesday quarterly.
Titus—Dr. W. H. Blythe, Mount Pleasant; 2nd Tuesday.
Upshur—Dr. T. S. Ragland, Gilmer; 2nd Tuesday.
Wood—Dr. V. E. Robbins, Quitman; last Friday monthly.

THE BOWIE COUNTY MEDICAL SOCIETY met December 31, 1915. The following members were present: Drs. Kittrell, Middleton, J. K. Smith, Read, Fuller, Hunt, Lanier, Mann, Dixon, Kosminsky, Grant, Beck, Center, Collom and Watts.

The resolutions adopted by the Southern Medical Association regarding preparedness in the Medical Department of the United States Army, were endorsed. The secretary was instructed to write the Senator and Congressmen from the district.

No scientific program was rendered.

The annual election of officers was held, with the following results: President, Dr. R. H. T. Mann, Texarkana; first vice-president, Dr. B. E. Dixon, Texarkana; second vice-president, Dr. W. B. Center, Garland City, Ark.; secretary-treasurer, Dr. E. M. Watts, Texarkana (re-elected); delegate, Dr. T. F. Kittrell, Texarkana; alternate, Dr. S. A. Collom, Texarkana; censor, Dr. T. E. Fuller, Texarkana.

THE TITUS COUNTY MEDICAL SOCIETY held its regular meeting December 14, 1915, with the following members present: Drs. Johnson, Crabtree, Broadstreet, Grissom and Blythe.

The president appointed Drs. Crabtree, Grissom and Broadstreet, a committee to draft suitable resolutions on the occasion of the death of Dr. James S. Miller.

The next business to engage the attention of the entrenched five was the election of officers for 1916. The election resulted as follows: President, Dr. W. R. K. Johnson; vice-president, Dr. S. R. Crabtree; secretary-treasurer, Dr. W. H. Blythe (re-elected); censor Dr. S. C. Broadstreet.

Dr. Johnson read an article from the December number of the *Medical Council*, *Why I Do Not Attend Society Meetings*.

[SECRETARY'S NOTE: No more money or business coming up or in, we got around the big stove and for some time held a real old-fashion fireside chat. We didn't even neglect the delinquents, diddly-didlers or members who do not attend. Well, we talked about a good many things of considerable interest, and we are not going to tell it only in our meetings. At ten minutes to four o'clock the sun looked as though it was in a hurry to get into Mexico, and not wishing to hold 'till sundown, we just quit and went out and had refreshments.]

DISTRICT PERSONAL.—Dr. C. A. Smith, Chief Surgeon of the Cotton Belt, continues seriously ill at the Company Hospital, at Texarkana.

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

W. H. Hargis, President.....San Antonio.
W. H. Blythe, Vice-President.....Mt. Pleasant.
H. L. Wilder, Secretary-Treasurer.....Glen Rose.

CHANGES OF ADDRESS.

Dr. B. F. Currie, from Burke to Kerrville.
Dr. A. T. Talley, from Diboll to Conroe.
Dr. W. L. Helms, from Jonah to Taylor.
Dr. J. H. Mitchell, from Graford to Elysian Fields.
Dr. A. F. Ferrell, from Cistern to Hallettsville.
Dr. A. E. Barrett, from Pampa to El Paso.
Dr. W. H. Doty, from San Antonio to Del Rio.
Dr, L. W. Price, from Cleburne to Ennis.
Dr. Archie Cole, from Mobeetie to Pampa.
Dr. Alfred Ahlman, from San Marcos to Millett.
Dr. Chas. V. Bomar, from Cross Plains to George West.
Dr. C. B. Leggett, from Gorman to Abilene.
Dr. E. E. Thomas, from Frosa to Mart.
Dr. W. E. Herrin, from Miles to Vickery.

NEW AND REINSTATED MEMBERS.

Dallas County—A. M. Gantt, R. G. Loyd, Dallas.
Jefferson County—C. A. Penmon and S. J. Pate, Beaumont.
Tarrant County—H. B. Littlepage, J. T. Montgomery and K. J. Scott, Fort Worth.

TO THE RETIRING SECRETARY.

Dear Doctor: Please do not forget that you have not been relieved of your official obligation until you have reported the results of your annual election, to the State secretary. It is important that the State secretary know at all times who are the responsible officers of each county society, particularly as to the secretary. This information may frequently come to him through devious and indirect channels, but he is entitled to have it direct and officially. The Journal undertakes each month to publish in its Society News columns, at least the name and address of the secretary and time of meeting of each district and county society. There has been some complaint that this data is inaccurate, which complaint the State secretary respectfully passes up to county and district society secretaries. This is really a matter of some consequence, and it would take but very little effort and forethought on the part of the retiring secretary each year to send in a complete and accurate account of the annual meeting, including all necessary data, for the information of the State secretary and through him the readers of the Journal.

Also, please remember that your obligation cannot possibly be discharged until you have committed into the care and keeping of your successor, the books and archives of the society, having a care to explain to him the importance and meaning of every item. The State secretary frequently receives requests from county secretaries for most rudimentary information as to their duties, with requests for those items known to be in the hands of the former secretary. The Councilors are troubled greatly in this respect, also, and frequently make complaint that retiring secretaries simply drop everything and retire, when their successors have been elected. This is not right, and the State secretary feels that no county secretary who will pause and reflect for a moment, will be guilty of such glaring neglect of the commonest personal and official obligation.

The State secretary thanks you most kindly for your services to organized medicine, and to his office.

TO THE INCOMING SECRETARY.

Dear Doctor: Please undertake to secure from your predecessor the books and archives of the society, and ascertain from him the meaning and purport of each item. This is very important, and you will be able to make your term of office a much more complete success if you start with a full understanding of your duties and a full account of the previous transactions of the society before you. Your predecessor may be one of those careless individuals, who, although a well meaning person, has to be forced. He will doubtless respond to your advances, and is doubtless a very accommodating fellow, after all.

Whatever else you may have in mind to do for your society during the forthcoming year, your most important and immediate duty is that of collecting dues. Most members will pay promptly and without complaint, if approached in a proper manner. This is not a personal matter, and it would not be so considered if the amount due represented indebtedness to some fraternal order. Make a business of collecting dues, and let it be known that your time is not being paid for. A member should really feel obligated to you for calling for his dues, and if he is a right thinking individual he will; if not, who cares what he thinks?

Dues are due January 1st. The county secretary has until March 31st to make his annual report to the State secretary. There is no question but those members who do not appear on this annual report are delinquent, and that delinquency dates from January 1st. It is just possible that the period between January 1st and the date any member actually pays his dues to the county secretary, constitutes a period of delinquency also. The Council on Medical Defense at the present time rules the other way, but the wise member will not take any chances. The Council handles a trust fund, and may not use its own predilections in the matter of administration.

Annual report blanks will be mailed February 1st, together with full instructions as to the requirements of the situation.

SOME OF THE CAUSES FOR NON-PAYMENT OF DUES.*

BY

E. F. GOUGH, M. D.,

WAXAHACHIE, TEXAS.

You will note that this paper is headed "*Some of the Causes.*" I would not be presumptuous enough to attempt to enumerate all of them. I have been a secretary for three years, and I will attempt to relate only a few that have confronted me during this time.

If I were called upon to tell in one word what the dominant cause of failing to respond to the call of the secretary for the small amount necessary to keep them in affiliation with their county societies, I would say JEALOUSY and put it in capitals. This spirit, fostered and cultivated by a class that should be above the petty things of life, is one of the most damnable and most to be despised of all things.

So often have I approached some of our "best" physicians and asked them to become members or renew their allegiance to organized medicine, and had them say to me, "You fellows keep Dr. So and So in there and I don't propose to go in so long as you let such men as him take the leading part in the society." Nine times out of ten this feeling is exhibited by physicians living in the same town and in direct competition with each other; it is merely a case of dollars and cents with them and not for

*Read before the State Association of County Secretaries, State Medical Association of Texas, Fort Worth, May 6, 1915.

the good of the profession in general. Often they are neighbors and it reaches the point where they absolutely refuse to speak to each other. It should be at all times the endeavor of the secretary, or any one else that has the interest of the profession at heart, to try to dispel this feeling and foster a feeling of good fellowship. We should try to make them feel that their neighbor has as much right to exist as they, and from the income derived by the practice of medicine; that their neighbor has a right to his way of thinking as well as they, and that it takes two to make a quarrel.

The next cause I desire to mention is neglect. Yes, they aim to come in all right, but just never can think of it when it is convenient to send in the money. They are among those who remind you of the old song, "There's time enough yet." They think that the secretary will not allow them to become suspended, and that he will send their dues in for them, depending on getting it at some future time. I did this my first year as secretary and lost $9.00. I paid for my experience and have avoided a recurrence. These are the same who will promise to read a paper and put off preparing it until the last minute, and maybe altogether, claiming to be too busy, etc. They will put off writing a letter or paying their little thirty day bills, or strictly attending to the little things of life which go to make up the big things.

The next thing that impresses me is the lack of a definite idea as to when dues are due. So many think that they don't need to pay until just in time to get the money to the State Secretary before the Annual Session. We should strive to educate our members that their dues should be paid in January and that it works a great hardship on the county as well as the state secretary, to procrastinate.

Some refuse to pay because they or their man was defeated for some office for which they were working. This I suppose, would be called *spite*. You know, some people take great delight in feeling like they are spiting someone and usually they themselves are the only ones that feel it.

Then, some are over sensitive. They are looking for slights and rebuffs, and think that the president or secretary, or someone who usually takes the lead in the work, is not giving them a square deal. We can always see that for which we are looking, and when we are looking for one to "not treat us right," we generally go away with our feelings hurt, because we have them dragging in the sand, where they are easily stepped upon.

Another cause is lack of interest, produced by non-attendance. If these could be made to feel that the society is *ours* and not *theirs*, and could be made to attend the monthly meetings, they would have an interest in its advancement and be willing to invest the small amount required to forward its cause. Paul says, "Where a man's treasures are there will his heart be also." The reverse of this is also true, that where a man's heart is he will be willing to invest his treasures.

Some say they can't learn anything at the society meetings and why pay to keep it up when they can't get anything from it? They don't care to hear some young upstart unwind on *Puerperal Eclampsia*, or some old fogy talk on *Colles' Fracture*, when they have a new Keen or Hurst at home that they can read and get more from. This class reminds me of the fellow who stays away from church because he has a new bible at home in a good state of preservation. They have to be made to feel that they can't hope to get interest where they have not made an investment and that they must put some of their time and money in the society to reap the reward. This can be called selfishness. They have not been made to feel the teaching of the Christ, that there is more pleasure in giving than receiving. If we could be made to feel this spirit, the paltry sum of $4.00 would look very insignificant indeed to the pleasure and benefits derived—they would be enthusiastic members of organized medicine.

DEATHS

Dr. James Stephen Miller, of Mount Pleasant, died at his home November 28, 1915. He was born September 30, 1853, in Medon, Tennessee. He graduated from the University of Louisville, Medical Department, Kentucky, in 1877, and began the practice of medicine in Rusk County, Texas, where he practiced two years. In 1878 he married Miss Margaret Gladney, and removed to Mount Pleasant, where he continued in the practice of medicine until his last illness. He was sick less than a week. He is survived by his widow and six children, three sons and three daughters.

He was a Royal Arch Mason and a K. P., and a member of the State Medical Association.

BOOK NOTES

Appleton's Medical Dictionary. Edited by Smith Ely Jeliffe, A. M., M. D., Formerly Instructor in Biology, Woman's College of Baltimore, and Special Contributing Editors, Robert M. Green, M. D., Harvard Medical School, Robert Anthony Hatcher, Ph. G., M. D., Cornell University, William Henry Howell, Ph. D., M. D., Sc. D., LL. D., Johns Hopkins University, Arthur H. Koelker, Ph. D., M. D., Johns Hopkins University, William Royal Stokes, M. D., Sc. D., College of Physicians and Surgeons, Baltimore, Arthur K. Stone, A. M., M. D., Harvard Medical School. Limp leather, 8vo., 945 pages, red edges. D. Appleton & Company, New York and London. 1915.

We have been put to it so often for definition of new terms, terms not to be found in the latest editions of the dictionaries at our command, that it has become a source of much worry, labor and uncertainty, having often to have recourse to the Greek and Latin lexicons for the possible roots which the word makers had made use of. We wrote to several publishers about this difficulty, complaining that they were sending us books for review containing many words of which we had no knowledge. Only the Appletons have responded with a new vocabulary.

This book has proven very satisfactory, since we have been able to find all the newest words yet occurring in any book sent in since its arrival. It is well made throughout, and contains, in addition to the 890 pages of words and their definitions, an appendix of 52 pages, telling how to analyze the body fluids, showing the comparative sizes of epithelia found in the urine, and their origin and significance, in a chart used by Professor Leitzman; how to make blood examination; sputum examination; examination of the stomach contents; stool examination; how to determine blood pressure; how to examine spinal fluid; examination of vaginal smears; examination of pleural and ascitic fluids; dietary; birth and death certificates; the classification of diseases causing deaths; list of states reciprocating under the various medical practice laws, and of states not reciprocal; the more common poisons, their antidotes and treatment; tables of weights and measures; suggestions to medical

authors, and proof-reading. The book is handy, strong and durable.

THE PRACTICAL MEDICINE SERIES. Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the General Editorial Charge of Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Southwestern University Medical School, Series 1915. Chicago. The Year Book Publishers, 327 La Salle Street. Price for the Series $10.00.

These little volumes are issued monthly, in series, for ten months each year, and have been published after this plan for many years. They stand as a connecting link between the ephemeral current publications and the permanent library books, giving in substantial form the valuable data sifted from the more voluble and less convenient forms of first publication.

The talent employed in the compilation of these books is a guarantee of their value. They are uniformly bound, in cloth and of handy size. They are printed on good book paper, in 10 point type and illustrated where appropriate; also indexed, with the source of data given in foot notes.

VOLUME I. GENERAL MEDICINE. By Frank Billings, M. D., M. S., and J. H. Salsbury, A. M., M. D., 1915. $1.50.

Contains what is newest about infectious disease, disease of the lungs, heart, arteries, blood and blood-making organs, ductless glands; metabolic diseases; diseases of the kidneys; an index, and an index of authors supplying material for the text.

VOLUME II, GENERAL SURGERY. By John B. Murphy, A. M., M. D., LL. D., F. R. C. S., England (Hon.), F. A. C. S. $2.00. 1915.

Contains articles on anesthesia, analgesia, radiotherapy, radiumtherapy, new instruments, operative technic, wound healing and pathologic interventions, tetanus, malignant tumors, blood vessels, bones, joints, myositis, skull and brain, face and mouth, oesophagus, neck, thyroid and thymus, the mamma, the thorax, abdominal surgery-general, the peritoneum, mesentery, stomach and duodenum, intestinal surgery general, intestines, the vermiform appendix, rectum, hernia, liver, gall-bladder and bile ducts, pancreas, spleen, kidney, spine and cord, the upper extremity and the lower extremity.

VOLUME III, EYE, EAR, NOSE AND THROAT. By Casey A. Wood, C. M., M. D., D. C. L., Albert H. Andrews, M. D., and William L. Ballenger, M. D. 1915. $1.50.

This volume contains whatever advances have been made in relation to examination, diagnosis and treatment of the eye, ear, nose and throat, culled from the literature of the year, and written by men who are specially qualified to discuss the subjects they have undertaken to handle.

VOLUME IV. GYNECOLOGY. By Emilius C. Dudley, A. M., M. D., and Herbert M. Stowe, M. D. 1915. $1.35.

Part I treats of general principles, as physiology, operative technique, and anesthesia; Part II of disorders of menstruation; Part III of displacements and injuries; Part IV of infections and allied disorders; Part V of malformations and tumors; Part VI of sterility.

VOLUME V. PEDIATRICS, ORTHOPEDIC SURGERY. By Isaac A. Abt, M. D., and John Ridlon, A. M., M. D., with the collaboration of Charles A. Parker, M. D. 1915. $1.35.

Contains chapters on diseases of the new born, infant feeding, infant mortality, disorders of nutrition, gastro-intestinal diseases, scarletina, measles, diphtheria, pertussis, parytyphoid fever, poliomyelitis, syphilis, tuberculosis, diseases of the respiratory apparatus, diseases of the blood, the ductless glands, urinary organs, nervous system, skin; Pott's disease, joint tuberculosis, ankylosis of the spine, arthritis, scoliosis, sponylolisthesis, painful back, torticollis, deformity at the neck, congenital dislocation of the hip, Madelung's deformity of the wrist, infantile paralysis, flat foot, pes calcaneus, spastic paralysis, osteochonditis of the hip, epiphyseal separation, coxa vera, fractures, and repair of bone defects.

VOLUME VI. GENERAL MEDICINE. By Billings and Saulsbury. 1915. $1.50.

A six months resumé of the advances in general medicine, along the lines of infectious diseases, diseases of the mouth and esophagus, diseases of the stomach, diseases of the intestines, diseases of the liver and gall-bladder, and diseases of the pancreas.

VOLUME VII. OBSTETRICS. By Joseph B. De Lee, A. M., M. D., with the collaboration of Herbert M. Stwoe, M. D., 1915. $1.35.

Brings the literature of its subject up to date in a handy little book of 230 pages, 10 point. Divided into four parts; then divided into paragraphs with blackface lines. Part I is devoted to the progress in pregnancy; Part II is on labor; Part III the puerperium; Part IV the new born.

PROGRESSIVE MEDICINE. A Quarterly Digest of Advances and Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., of the Jefferson Medical College, Philadelphia, and the University of Pennsylvania; and Lieghton F. Appleman, M. D., Jefferson Medical College, and the Philadelphia Polyclinic Hospital and College for Graduates in Medicine. Lea & Febiger, Philadelphia and London. 1915. $6.00 per year.

As a digest of the advances, discoveries and improvements in medical and surgical science this publication is a decided success.

VOLUME I. Surgery of the Head and Neck; Surgery of the Thorax, Including Diseases of the Breast; Infectious Diseases, Including Acute Rheumatism; Croupous Pneumonia and Influenza; Diseases of Children; Rhinology and Laryngology; Otology.

In addition to those from the well known editors, there are contributions from Floyd M. Crandall, M. D., Charles H. Frazier, M. D., George P. Müeller, M. D., John Rurähl, M. D., Truman L. Saunders, A. B. M. D. and George B. Wood, M. D.

VOLUME II. Hernia; Surgery of the Abdomen, Exclusive of Hernia; Gynecology; Diseases of the Blood; Diathetic and Metabolic Diseases; Diseases of the Spleen, Thyroid Gland, Nutrition, and the Lymphatic System; Ophthalmology.

This volume also contains contributions by John G. Clark, M. D., William B. Coley, M. D., John C. A. Gerster, M. D., Edward Jackson, M. D. and Alfred Stengle, M. D.

VOLUME III. Diseases of the Thorax and its Viscera, Including the Heart, Lungs and Blood Vessels; Dermatology and Syphilis; Obstetrics; Diseases of the Nervous System. Paper, 8vo., 307 pages, illustrated.

The contributors are Edward P. Davis, M. D., William Ewart, M. D., F. R. C. P., William S. Gottheil, M. D. and William G. Spiller, M. D.

VOLUME IV. Diseases of the Digestive Tract and Allied Organs, the Liver, Pancreas, and Peritoneum; Diseases of the Kidneys, Genito-Urinary Diseases; Surgery of the Extremities; Shock, Anesthesia, Infections, Fractures and Dislocations, and Tumors; Practical Therapeutic Referendum.

Contributors are Harold J. Austin, M. D., Joseph C. Bloodgood, M. D., Charles W. Bonney, M. D., Edward H. Goodman, M. D. and R. H. M. Landis, M. D.

SAUNDERS CATALOGUE OF BOOKS. Medicine, Surgery, Veterinary, Dentistry, Nursing, Revised to January, 1916. West Washington Square, Philadelphia, and 9 Henrietta Street, Convent Garden, London, England. Paper, 84 pages, 8vo. Free.

This enterprising firm of medical book publishers have established a branch house in London, and of its success they have to say, "The inauguration of our London Offices met with immediate success." * * * "The foreign market is a rich field, and American medical books have won for themselves a place of first rank."

A glance at the array of splendid books on all the medical and allied sciences and the study of their publications, will show why American medical literature is a success in Europe, and wherever the English language is used.

SIMPLIFIED INFANT FEEDING. With Seventy-Five Illustrative Cases. By Roger H. Dennett, B.S., M. D., Adjunct Professor of Diseases of Children, New York Post-Graduate Medical School; Attending Physician of the Children's Department, New York Post-Graduate Hospital; Assistant Attending Physician at the Willard Parker Hospital and the Red Cross Hospital, New York. With 14 illustrations. 8vo., cloth, pages 355. J. B. Lippincott Company, Philadelphia and London. 1915.

The author of this work, who is a man of superb qualifications, has undertaken to brush away the acccumulated theoretic mists which have by decades of empirical speculation been heaped upon the subject and "gummed the cards" for the practician and student, and render genuine aid to the physician who must often improvise a rational, safe regimen for the support of a life which hangs upon his ability to be sure of what is best. His work will be found sufficiently clear, brief and pointed to remember and rely upon, if studied with the application the subject demands. This book has grown out of the tested requirements of a teacher of post-graduate students, whose work must pass muster before physicians of personal, and sometimes bitter experiences, which have driven them to the post-graduate centers for help.

THE MEDICAL CLINICS OF CHICAGO. VOLUME I. Bi-Monthly, W. B. Saunders Company, Philadelphia and London. $8.00 per year, of six numbers, bound in paper, 8vo., of about 600 pages each number.

These clinics are both instructive and interesting. They deal with the very problems confronting the physician every day, at home. The Chicago Clinics are designed to be to internal medicine what the Murphy's Clinics are to surgery, and they will serve a good purpose for the physician at home as he attends the sick and studies what he may as he works.

NUMBER I. Published in July, 1915, reports eight clinics, held by Drs. Mix, Williamson, Abt, Preble, Goodkind, Tice, Hamburger and Hamill, at Mercy Hospital, Cook County Hospital, Michael Reese Hospital and St. Luke's Hospital, and is devoted to Internal Medicine.

NUMBER II. This volume is filled with clinical reports from the same sources as those in Number I, with a contribution from Dr. William Allen Pusey, on *X*-rays and Epithelioma.

NUMBER III. In this volume there are clinics by Drs. Williamson, Hamill, Tice, Abt, Preble, Hamburger, Mix and Tivnen, from Cook County, Sarah Morris Memorial for Children, St. Luke's and Mercy Hospitals.

INFECTION AND IMMUNITY. A Text-book of Immunology and Serology. For Students and Practitioners. By Charles E. Simon, B. A., M. D., Professor of Clinical Pathology and Experimental Medicine, College of Physicians and Surgeons, Baltimore; Pathologist to the Union Protestant Infirmary, the Women's Hospital of Maryland and the Mercy Hospital, Baltimore. Third Edition, enlarged and thoroughly revised. Octavo, 351 pages, illustrated. Cloth, $3.25 net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

Prof. Simon says, in the preface to this edition, that "Another call for a new edition of Infection and Immunity has given the author the opportunity to introduce a certain amount of new matter, which seemed of especial interest to the student of this fascinating subject. The recent advances in the study of Abderhalden's protective ferments and the associated technique have thus received detailed consideration. The section on the Wassermann reaction has been almost entirely rewritten. Attention has been directed to the manner in which the danger from anaphylactic shock during serum treatment may be reduced to a minimum. Emphasis has been given to the important observation of Schick and his collaborators, that it is possible through the aid of the allergic skin reaction to recognize those individuals whose blood normally contains a quantity of diphtheria antitoxin sufficient for purposes of protection. The same is true of the observation of Ashhurst and John, that by suitable technique more encouraging results may be obtained in the treatment of tetanus, after symptoms of the disease have once developed, than heretofore. The possibility has been pointed out that by means of vaccine treatment, Hodgkin's disease may be advantageously influenced, etc."

The former editions of this book have been favorably noticed in these Notes. Its value to the profession was proven by the instantaneous, universal favor it won, and it needs only to be commended to strangers to its text, if such there be.

BOOKS RECEIVED.

Laboratory Methods, 3rd Ed., *Williams and Williams* (Mosby).

Diseases of the Skin, *Hazen* (Mosby).

International Clinics, 25th Series, Vol. IV, 1915. (Lippincott Co.)

Chicago Clinics, December, 1915.

Murphy's Clinics. December, 1915.

Bandaging, *Whiting* (W. B. Saunders Co.)

Post Mortem Examinations, *Wadsworth* (W. B. Saunders Co.)

Practical Cystoscopy, 2nd Ed., *Pilcher* (W. B. Saunders Co.)

Bone Graft Surgery, *Albee* (W. B. Saunders Co.)

Text-Book of Physiology, 6th Ed., *Howell* (W. B. Saunders Co.)

Practice of Medicine, 12th Ed., *Anders* (W. B. Saunders Co.)

Injuries of the Eyes, Nose, Throat and Ears, Oxford War Primer, *Ramsey-Grant-Whale-West*, (Oxford University Press).

Instinct and Intelligence, *MacNamara* (Oxford University Press).

Medical Lectures and Clinical Aphorisms, 4th Ed., *Gee* (Oxford University Press).

Diseases of the Throat, Nose and Ear, *Kelson* (Oxford University Press).

A Guide to Gynecology in General Practice, *Berkley-Bonney* (Oxford University Press).

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VOL. XI. FEBRUARY, 1916 No. 10

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

BIRTH REGISTRATION.

A bulletin recently issued by the State Department of Health, shows some interesting facts in regard to the matter of birth registration in particular. This bulletin estimates that at least 5,494 children per month, or 65,928 per year, born in Texas, are not registered. In accordance with population, there should be a birth rate per month of 10,598, whereas there were only 4,465 births reported for the month of December. There were at the same time 2,637 deaths reported, which is considerably more than half of the birth rate. In some cities the death rate has apparently exceeded the birth rate, and the ridiculousness of such statistics has been more than once pointed to by the lay press.

Of 1,167 birth certificates sent to the Health Department for one month, only 168 were complete, as prescribed by law. In this batch were statistics from Galveston, San Antonio and El Paso, the only cities in Texas from which such statistics are satisfactory to the Federal government. On 372 of these certificates the name of the county and city were omitted, and on 2 per cent. of the certificates the physicians failed to state whether the child was legitimate or otherwise.

Considering the fundamental importance of the subject, it is passing strange not only that physicians who are morally and actually bound, and according to the implied if not the actual terms of their contract with the family, but the public as well, should tolerate such a situation. It seems to be wholly a matter of failure to appreciate the importance of birth registration, both on the part of the medical profession and the laity. In line with the recent agitation of the question in the public press, we are presuming to add our voice.

As to the importance of birth registration, we may urge that:

Questions of legitimacy or illegitimacy, which may arise in the best regulated families, may often be settled only by reference to the fact of proper birth registration.

The matter of inheritance, and other property rights as well, may often depend on ability to prove direct descent, and this is often impossible except by reference to proper birth registration.

Nice legal points pertaining to the so-called "age of consent" in the girl, and eligibility to reformatory or penitentiary incarceration, and even capital punishment, may often be properly and justly solved only through the agency of a properly recorded birth certificate. Too frequently these important issues are to be decided only by reference to an old family bible, perhaps prepared for the purpose, and in order to frustrate the ends of justice.

Eligibility to enter our public schools, or the State University, either in its main department or its professional schools; eligibility to office; eligibility to service in the Army or Navy, or opportunities in a business way, may depend absolutely on the recorded birth certificate.

The proper administration of child labor laws, and the recently enacted compulsory education law, is impossible without proper birth registration.

Dependable statistics relating to infant mortality and morbidity, particularly as to the existence of blindness, may not be gathered, except through the agency of birth registration.

The commercial value of vital statistics has

long since been thoroughly established. Incomplete birth registration and complete death registration, gives the appearance of extremely unhealthful conditions. In Texas, the deaths are generally reported because of the requirement that no one may be buried without a permit, which requirement directly pertains to an important business enterprise. In comparison, the death rate and birth rate appear entirely disproportionate, reflecting unfairly on the healthfulness of our State and the several communities involved.

In this country there are many people of foreign birth, and it is very important that the citizenship of their offspring be established by law, in the instance any of these children should desire to return for a visit to their fatherland, and should happen to be needed for military or other purposes.

Much attention is now being paid to the care of babies, and to the instruction of mothers as to their care, particularly by the Children's Bureau of the U. S. Department of Labor, and it is important that these helpful agencies may know where to deliver the useful information and helpful instructions they are gathering and distributing daily.

It is said that one-third of the blindness in the United States is due to lack of care of infants at the time of birth. If births are not properly recorded, health officers and other agencies can do little to save the sight of these unfortunates. There are many other preventable diseases and ailments to be considered in the same light.

It is said that the birth record is perhaps the starting point of about 75 per cent. of our effective baby saving work.

Dr. William R. Bach, Chairman of the Committee on Birth Registration of the American Association for the Study and Prevention of Infant Mortality, in his report, 1911, said:

"Why should the visiting nurse or the medical inspector go groping blindly around the courts and tenements for babies, when a properly conducted birth registration bureau would send them on their journey with absolute directness? There is ample ammunition upon every standard birth certificate to equip every inspector in advance of house visitation with knowledge of the most vital character. The visiting nurse knows the plague spots of her particular district; she knows where poverty and overcrowding exists; where contagious diseases thrive, where dirt abounds and where sunshine never penetrates. The mere statement of locality upon the birth certificate should bring the individual picture before her."

In New Zealand, where birth registration has existed for many years, statistics show a steady and stable decline in the infant death rate, until in 1912 it was only 3.8 for every 100 births, probably the lowest in the world.

Something of the importance of proper birth registration may be judged from the fact that in 1913 there were 15,496 certified copies of the birth records made in New York, and 123,347 free statements issued for school and employment purposes. That is to say, the birth records on file in New York City helped to enforce the personal or property rights of 138,842 persons during that one year alone.

Dr. Cressy L. Wilbur, before the American Statistical Association in 1913, said:

"Vital statistics is the Cinderella of modern public hygiene. She sits in the chimney corner and sifts the ashes of dusty figures, while her proud sisters, bacteriology and preventive medicine, go to the ball and talk about the wonderful things they have done. But the Prince's slipper fits no other foot, and when we descend to fact, and not to empty bombast, about the results of administrative work, accurate vital statistics are our sole dependence. What do we know about infant mortality, which we are all so anxious to prevent, when not a single State or city in the United States has the data for a correct statement?"

In Kentucky the State Bureau of Vital Statistics has been aptly called "Kentucky's Big Family Bible," and the newspapers have given considerable publicity to this unique and catchy designation. The success of the "Model" vital statistics law in this State, is said to be phenomenal, and no doubt a large part of it is due to the widely heralded idea that the Bureau is the family bible of all the people, insofar as the recording of births and deaths is concerned.

For the present, the subject of morbidity is with us not so pressing, for the reason that reports of contagious diseases, and diseases of other character, are not made with any greater frequency than are the birth reports, and misleading statistics are not for that reason so easily derived. However, the deaths are recorded, together with the causes of death, which in the face of almost universal disregard of the obligation of birth reports, is productive

of entirely false and misleading ideas of both morbidity and mortality. The commonly accepted method of stating infant mortality is as the ratio of children under 1 year of age to living births, and is usually expressed as the proportion of deaths during the calendar year to 1,000 living births during the same period. If in a city there were during any year 224 deaths of infants under 1 year of age, and if during the same year there were 2,000 births, the infant mortality rate would be 112 per 1,000 births, per annum. It is easy to see how, if all of these deaths are reported, and only half the births, the death rate will appear to be much greater.

The present vital statistics law has a birth registration requirement, which, while not as full and as effective as the "Model" law, does very well for the present. It at least provides a fine of not less than $10.00 and not more than $1,000.00, for failure to report births. The so-called "Model" law was drafted in 1907, and was patterned after the Pennsylvania law. It has since been endorsed by the Census Department of the United States Government, The American Medical Association, The Public Health Association, and a host of other organizations interested in the subject.

Birth registration failure lies in two directions. First, the medical profession, and the midwives, in their haste, and perhaps because of their greater concern in the safety of the patients, fail to make the reports; second, the municipal and county registrars do not insist sufficiently that these reports be made, and do not transmit those that are made to the State Registrar with sufficient faithfulness. Probably there will be fault to find in the matter of birth registration until the mothers of the State take the matter in their own hands.

There are a number of splendid pamphlets on this subject, which may be had for the asking, and which will be of great benefit to any who are interested, or to any who may expect to discuss the subject before the public.*

*"Why Should Births and Deaths be Registered?"; the American Medical Association, 535 North Dearborn St., Chicago, Ill. "Birth Registration"; the United States Department of Labor, Washington, D. C. "Vital Statistics"; the United States Public Health Service (known as Supplement No. 12, to the *Public Health Reports*, April 3, 1914).

FEDERAL AID IN CARING FOR INDIGENT TUBERCULOUS PERSONS.

A bill has been introduced in Congress, the purpose of which is "to standardize the treatment of tuberculosis in the United States, to provide federal aid in caring for tuberculous persons, and for other purposes." In the Senate this bill is known as S. 3,202, which was introduced by Senator Norris of Nebraska, and in the House as H. R. No. 8,352, introduced by Mr. Kent of California. The bill provides aid for State authorities in the care and treatment of indigent tuberculous persons who are citizens of the United States, but not legal residents of the States in which they are temporarily located, in the form of a subsidy, not to exceed 75 cents per diem for each indigent patient admitted to a public hospital and coming within the purview of the proposed law. It is provided that public hospitals and sanatoria, such as have received the full sanction of the U. S. Public Health Service, shall participate in the subsidy, and that the State shall pay or cause to be paid a subvention not less than that paid by the Federal government towards the cost of caring for the patients thus provided for. Subventions under this law will be granted only in the case of indigent patients who have submitted satisfactory evidence that they were not assisted by any persons or institution to leave their legal residence, or did not themselves leave in order to receive benefits under this act. The Secretary of the Treasury is authorized to issue regulations governing the designation of institutions and establishment of standards required in their management. An attempt will be made to have the bill so amended as to provide that under well guarded circumstances, individuals may be returned to their former homes for treatment and care, with funds appropriated under this act, with the special provisions that no funds be appropriated for their care in their respective home States.

It is our understanding that this measure has been put forward mainly at the instance of the California State Board of Health, and that it has the approval of the Southwestern Conference on Tuberculosis, and the Boards of Health and State Medical Associations of the Southwestern States, insofar as they have had an opportunity to pass upon the problem. There seems to be no reason why we should not

all warmly endorse this measure, and strive to secure its passage. Those who will interest themselves are urged to immediately take the matter up with our Senators and their own Congressmen.

It may be recalled by many, that the State Association in 1913, endorsed a measure proposed by the Southwestern Conference on Tuberculosis, and providing for the establishment and maintenance of hospitals for the segregation, treatment and education of stranger consumptives in the Southwest. The purpose of this measure was to reduce the menace to interstate commerce established by the free migration of indigent tuberculous persons, aside from the educational and broad humanitarian purposes frankly acknowledged. It will be noted that the present measure lays claim to an entirely different federal obligation, which, as a cause for action, suits our ideas much better. And while we are still rather of the opinion that it would be better for the federal government to establish a series of hospitals throughout the Southwest for the care of these persons, assuming the whole burden, the present measure has many attractive features, the most notable of which is that of standardization by the U. S. Public Health Service. It is not at all improbable that from such a beginning, which, if the measure becomes a law, will be almost coincident with the movement set on foot by the American Medical Association, for the standardization of hospitals as an aid to medical teaching, will arrive a government established standard for hospitals, highly beneficial to the public in general. It is quite certain that a subsidy of this character will greatly encourage the enlargement of existing hospitals and sanatoria, and the building of others. Texas has sought to make a good beginning in the matter of caring for tuberculous persons, in the establishment of the splendid sanitarium at Carlsbad, and the recently enacted municipal hospital law is another long step in the desired direction. At the present time some of our communities are rather inclined not to attempt to establish hospitals, for fear they will be overrun by indigent tuberculous persons for whom they are not responsible, and if they can feel that a subsidy is forthcoming on a "fifty-to-fifty" basis, it is quite likely that they will feel greatly encouraged to push the proposition.

The U. S. Public Health Service, about a year ago, following the agitation on the part of the Southwestern States for Federal aid, conducted a thorough investigation of the territory in question, with a view of determining the bearing on public health of interstate migration of tuberculous persons. Past Assistant Surgeon E. A. Sweet conducted the investigation, and his report was most exhaustive, indeed. It was published in installments in the *Public Health Reports,* last Spring, which may be had, we are sure, by application to the Surgeon-General at Washington. The investigations carried out our contention that the presence of these persons in the Southwest was a great burden on the people and communities of this section, but tended to controvert our claims that the migration of these people constituted any considerable menace to our commerce, and even to the health of our people. At the same time, some interesting statistics were derived, and it is easy for those of us who reside in this section to understand why the statistics do not on their face show the menace we know them to constitute.

It is a well known fact, and so thoroughly established as to be beyond controversy, that the Southwest portion of the United States is favored with a climate, other things being equal, which is almost a specific for tuberculosis. This section of the country shows the highest death rate from tuberculosis to be found anywhere in the United States. The death rate from tuberculosis in the entire registration area of the United States, is 147.6 per 100,000, while in 1913, the death rates from this cause in one city in California amounted to 602.8 per 100,000. Surgeon Sweet gives the following figures for the Southwestern States for 1912: Albuquerque, N. M., 1,265.7; El Paso, Texas, 595.8; Colorado Springs, Colo., 574.5; San Antonio, Texas, 415.8; Denver, Colo., 299.7; San Diego, Cal., 357.5; Los Angeles, Cal., 255.7. California statistics show that in 1914, out of 5,320 persons who died with tuberculosis in that State, 427 had been in the State less than one year. It is estimated by the National Association for the Study and Prevention of Tuberculosis, that from 10,000 to 15,000 people

migrate into the West and Southwest every year on account of tuberculosis.

What are we going to do about it? We cannot quarantine against tuberculosis, for the reason that such a measure would not only be brutal, but thoroughly impractical. We cannot take care of all comers, at public expense or even private charity; such a demand would not only be highly unjust, but our communities are for the most part unable to assume the burden. We cannot deport these people, returning them to their homes; many of them reach our respective States in the last stage of the disease, and will not bear transportation, and it costs money to buy railroad tickets and pay other traveling expenses. There is absolutely no way in law whereby the burden may be shifted to the State to which it of rights belongs. The only possible solution of the question is for the Federal government to lend its aid, either as contemplated in the measure under discussion, or some other way equally as well intended. The Federal government has long since decided that it is a part of its obligation to prevent the introduction into this country of pestilential diseases, and the appropriations yearly made for the protection of our live stock and agricultural interests amount to millions. Incidentally, it is said that a National Leprasorium is about to be established. Why, then, in the name of humanity and common justice, may not aid be extended in the care of indigent stranger consumptives in the Southwest? It can, and we confidently expect that the day is not far distant when it will be done.

ALUM IN FOOD.

A bulletin of the U. S. Department of Agriculture (No. 103) consists of the findings of the Referee Board of Consulting Scientific Experts, on the influence of aluminum compounds on the nutrition and health of man. Three questions were propounded, as to (1) whether aluminum used in foods, effect injuriously the nutritive value of such foods, as to render them injurious to health; (2) do these foods contain any added poisonous or deleterious ingredients which may render the food injurious to health, either in large or small quantities; and (3) if aluminum compounds be mixed or packed with a food, is the quality or strength of said food thereby reduced, lowered or injuriously affected.

This pamphlet has turned out to be interesting to us at the present time, because of continued agitation of the baking powder problem in the public and medical press. On the one hand, manufacturers claim that all baking powders containing aluminum compounds are injurious to health, and on the other hand, those manufacturers who use the aluminum compounds claim that the cream of tartar products are equally, if not more injurious. Between the two, it might be of interest to know whether baking powder, of whatever character, may be safely used in bread and cake making.

The Referee Board consisted of such eminent authorities as Dr. Russell H. Chittenden, Professor of Physiological Chemistry, Yale University, and Director of the Sheffield Scientific School; Dr. Ira Remsen, President of the Johns Hopkins University; Dr. John H. Long, Professor of Chemistry in the Northwestern University Medical School; Dr. Alonzo E. Taylor, Professor of Physiological Chemistry, University of Pennsylvania, and Dr. Theobald Smith, Professor of Comparative Pathology, Harvard University. Three sets of experiments were conducted, and, not to tire our readers with a detailed account of these, the conclusions of the Board, unanimously reported, were as follows:

"Aluminum compounds when used in the form of baking powders in foods have not been found to affect injuriously the nutritive values of such foods.

"Aluminum compounds when added to foods in the form of baking powders, in small quantities, have not been found to contribute any poisonous or other deleterious effect which may render the said food injurious to health. The same holds true for the amount of aluminum which may be included in the ordinary consumption of aluminum baking powders furnishing up to 150 milligrams (2.31 grains) of aluminum daily.

"Aluminum compounds when added to foods, in the form of baking powders, in large quantities, up to 200 milligrams (3.09 grains) or more per day, may provoke mild catharsis.

"Very large quantities of aluminum taken with foods in the form of baking powders usually provoke catharsis. This action of aluminum baking powders is due to the sodium sulphate which results from the reaction.

"The aluminum itself has not been found to exert any deleterious action injurious to health, beyond the production of occasional colic when very large amounts have been ingested.

"When aluminum compounds are mixed or packed with a food, the quality or srength of said foods has not been found to be thereby reduced, lowered, or injuriously affected."

In fact, the Board concludes that one kind of baking powders is no more harmful than another, but that it is wise to be moderate in the use of either. In other words, fresh light bread and cake are good in their place, and even very desirable from the standpoint of appetite, but they should not be chosen as exclusive articles of diet. The day of the old time beaten biscuits, soda and buttermilk biscuits, and even salt rising bread, is probably past for a great majority of our people, even in the Old South, and it is just as well that we get this hysteria over harmful baking powders out of our systems, particularly as all of the cream of tartar seems to be in the hands of an exclusive group of manufacturers.

HEALTH INSURANCE.

The State is gradually coming to a realization of the fact that the health and personal welfare of its citizens are of prime importance, and essentially a matter of State concern. Unlike most of the European countries, ours is not a paternal government. In other words, we extend to the individual the broadest range of personal liberty, inhibiting him in his movements only when his rights begin to overlap those of his neighbor. If an individual, or a collection of individuals, decide that it best for them to starve their bodies into such a weakened state that their mental and moral outlook is distorted, and their concepts at random with the truth, we have complacently agreed that it is their right to do so, provided they do not force into their ranks those who would prefer to look upon the matter differently, or in carrying out their peculiar notions they do not interfere with the rights of others. We have long held that if an individual desired to work for an employer who has more regard for his profits than for the lives and souls of his employees, it is their inalienable right to do so. If an individual .chooses to accept employment in which the chances for needless sacrifice of life and limb are great, we have decided that we have no right to interfere.

However, of late years there has been a public awakening along the line of social welfare, and on every hand we see evidence of a more wholesome regard for our fellow man and an earnest desire to make the welfare of the less fortunate the great concern of the fortunate. We are learning the lesson that we cannot live our lives alone, and that the rain falls on the just as well as the unjust. Eventually the State will hold it to be a misdemeanor for an individual to get sick, and he will have to prove his innocence of any contributory negligence, and the whole machinery of the government will be set to work to find the cause of the trouble. But that time is not yet, and when it arrives, we may expect to find the situation under control of the government and not in the hands of corporations designed for profit, no matter how well intentioned they may be.

For years damage suit lawyers have been reaping a rich harvest from unfortunate employers and less fortunate employees, following accidents in the causation of which both have played their part. The criminal neglect of the employer in not providing safety devices on the one hand, and the contributory negligence of the employee in not exercising ordinary precaution on the other, have been bewilderingly held up before the courts and juries, and it is not to be wondered at that injustice has frequently been done. Recognizing this unfortunate state of affairs, laws have been passed in nearly every State in the Union, providing that the employer and employee, through the intermediary of the State, shall settle these questions fairly to both parties, without the middle-man waste. In this adjustment the physician has not always been fairly treated, but his rights are being slowly recognized. At first the fees granted under these laws were ridiculously small, and they are yet still below the normal, but the authorities are everywhere showing a commendable spirit of conciliation, and there is no doubt but the outcome will be equitable. In some States, as in Texas, the intermediary consists of an insurance company, to be selected by the employer, and it is here that the greatest difficulty in the matter of adjusting fees for medical and surgical service has been experienced. We have heretofore had, and still have the alternative of not serving for the fees set out by either the State or the indemnity company elected by the employer. It is interesting to take note here of a by-product of the

process. In the attempt to manufacture justice for both the employer and the employee, it transpires that a rank injustice is about to be done the physician. The damage suit lawyer finding himself without the right to sue the employer, turns his attention to the physician, who has perhaps been more or less unfortunate in the results of his treatment. This industry has grown immensely of late, and is still growing. We are meeting the situation fairly with our Medical Defense Department.

For many years corporations have been securing for their employees the services of right competent physicians on a contract basis, where circumstances have not been such that practitioners of quality would find it worth while to work on the ordinary fee basis. In the poorer districts of great and crowded cities, philanthropic persons have opened dispensaries, and with the assistance of the medical profession have freely dispensed medical aid to those who, from an economic standpoint, could hardly have aspired to service of any kind. It has been to the advantage of the medical profession to have this work done in this manner, because the people must be cared for and the dispensaries are much more conveniently arranged for this character of work. In England, which is semi-paternal, the government after a long drawn out and rather bitter fight, has extended medical, surgical and hospital service, to those who are ordinarily not able to pay for any service at all, and while the physician secures for his work a fee much smaller than that to which he is entitled, in the long run he profits materially from the plan, insofar as it relates to those who are making really less than a living wage. It is our understanding that the fees are gradually being adjusted, and that the situation is now much more tolerable than it was to begin with.

And now it comes to pass, that a number of insurance companies have arisen, which propose to do in this country what the government in England has for some time been doing. It is proposed to organize panels and contract to care for those who will avail themselves of the opportunity thus offered. It seems that any individual, no matter how able he or she may be to pay an expert fee, may purchase the service of any physician on such a panel, paying in accordance with the character of the service to be demanded. The physician will get what the subscriber pays in, less a certain percentage for salaries and other expenses, usually amounting to something like half. The physician is supposed to save in this process the present enormous amount of charity work it is universally conceded that he does. Whether he will save this or not, depends upon whether the individuals who now claim his services on such a basis, will enter into contract with any of the insurance companies on the panels of which the said physician may happen to be. Chances are, that the average dead-beat, semi-charity or charity patient, is not on the list of any such insurance company, and the physician will still have him to care for. The companies will not have the authority to compel contributions from individuals to the insurance fund, and to that extent they will fall short of meeting the economic situation, about which there is and will be until it is adjusted, considerable discontent.

Some time ago the JOURNAL referred to this same subject, and at that time warned the profession against entering into any binding agreement with any corporation which expected to purchase their services on a wholesale basis, and retail them to the consumer for whatever might seem desirable. It makes no difference how commendable the intentions of such corporations are, the medical profession must look out for its own interests. The time has not yet come when we may safely relinquish our initiative and our right to claim expert fees, and we must not do so, even in the interest of a very desirable expediency, such as increasing the income of those of our number who may not have attained more than the very low average claimed to be that of the practicing physician, for instance. Neither the American Medical Association nor any State association, favors any such arrangement, except where economic conditions may demand, and under those conditions the profession is already caring for the situation. Already the American Medical Association has a sub-committee dealing with this problem, and they join hands with the leaders of the labor organizations in an attempt to frame legislation for adoption by the several States, which will provide health and accident insurance for those who by virtue of their moderate income may require assistance of this sort. We may rest

assured that the interest of the medical profession will be well cared for. Certainly, there can be no reasonable excuse for paying a corporation half of what we may make on such a basis, for the privilege of making it, and if the physician is to have agents seeking business for him, it is far better that he does his own selecting. It is safe to assume that a health insurance company is organized for profit, and while we may not impugn the motives of those behind such organizations, great caution should be exercised in making any binding alliance with them, at least until the situation has been developed more fully than it has to date.

LOCAL COMMITTEES FOR THE ANNUAL SESSION.

Word from Galveston is to the effect that arrangements for the annual session are in a fair way to completion, and it only remains to agree upon certain details, following a conference with certain State Association officials. It is anticipated that complete announcements will be ready in time for the April JOURNAL, according to custom and requirement of the by-laws.

It is suggested that all who are interested in any matters pertaining to the local arrangements for the annual session, take the matter up immediately with the proper committee chairmen. We are sure the Local Executive Committee will be glad of any suggestions particularly any which should tend to facilitate the work of the Association, or make more enjoyable the entertainment to be extended visitors. It is particularly important that those who desire advance arrangements made for alumni banquets, reunions and the like, take the matter up at once with Dr. Sappington, chairman of the Alumni Banquet Committee. It is equally as important that those who have reasonable assurance that they will be able to attend the meeting notify Dr. Ralston, of the Hotel Committee, in order that reservations may be made in due time. Doubtless, Galveston will have plenty of hotel accommodations for the whole party, but it is just possible that some of the late comers will have to accept rooms without bath, or possibly double up with friends. It is certain that there will be a large attendance at Galveston, and the wise thing to do is to make all arrangements in advance.

The committees are as follows:

LOCAL EXECUTIVE COMMITTEE: Dr. M. L. Graves, Chairman; Drs. Geo. H. Lee, A. W. Fly, W. F. Starley, Edward Randall.

ENTERTAINMENT COMMITTEE: Dr. Geo. H. Lee, Chairman; Drs. W. C. Fisher, Sr., A. O. Singleton, S. M. Morris, Fred W. Aves.

GENERAL RECEPTION COMMITTEE: Dr. James E. Thompson, Chairman; members of Galveston County Medical Society.

LADIES' RECEPTION COMMITTEE: Mrs. Edward Randall, Chairman; wives and members of Galveston County Medical Society.

LADIES' ENTERTAINMENT COMMITTEE: Mrs. M. L. Graves, Chairman; Mesdames Geo. H. Lee, W. S. Carter, Wm. Gammon, H. C. Haden, W. F. Starley, J. C. Ralston, A. G. Heard, Jas. E. Thompson.

ALUMNI BANQUET COMMITTEE: Dr. H. O. Sappington, Chairman; Drs. W. R. Cooke, W. C. Fisher, Jr., W. J. Jinkins, J. A. Flautt.

HALL AND EXHIBIT COMMITTEE: Dr. A. G. Heard, Chairman; Drs. Wm. Gammon, B. L. Arms, Wm. Keiller, H. L. McNeil, Henry C. Hartman, H. O. Sappington.

TRANSPORTATION COMMITTEE: Dr. T. L. Kennedy, Chairman; Drs. W. C. Fisher, Jr., G. E. Delaney, J. G. Flynn, E. S. Cox.

HOTEL COMMITTEE: Dr. J. C. Ralston, Chairman; Drs. W. J. Jinkins, Dick P. Wall, Ben F. Smith, Jr., C. T. Stone, G. S. Sykes, J. P. Tucker.

PUBLIC HEALTH LECTURE COMMITTEE: Dr. W. S. Carter, Chairman; Drs. L. P. H. Bahrenburg, Walter Kleberg, B. L. Arms, J. S. Davidson, Ethel Lyon Heard.

FINANCE COMMITTEE: Dr. Wm. Gammon, Chairman; Drs. Edward Randall, W. P. Breath, Henry C. Haden, J. G. Flynn.

NEW COUNCILOR FOR THE THIRD DISTRICT.

Dr. W. C. Dickey has resigned as Councilor of the Third District, and Dr. C. R. Hartsook of Wichita Falls, has been appointed by President Moody to fill the unexpired term. Dr. Dickey was elected to the office of Councilor at the San Antonio meeting, in 1913, and immediately thereafter was elected by the Council as Secretary. His service has been eminently satisfactory, and it is to be regretted that his health, which is the occasion for his resignation, will not permit him to serve longer in this capacity. However, Dr. Hartsook has had considerable experience in medical organization work, and is a physician of ability, besides. His appointment meets with the warm approval of his district society, that organization having recently recorded a vote of confidence in him, and appreciation of the appointment.

The JOURNAL feels that the profession of Texas owes to Dr. Dickey a debt of gratitude

it will hardly be able to pay. We wish for him speedy recovery of health.

MORE POISONOUS FLY PAPER STATISTICS.

Again following the lead of the *Journal of the Michigan State Medical Society,* we call attention to additional statistics on the subject of accidental arsenical poisoning of children, from the careless use of fly destroying compounds sold without restraint in the open market.

During 1915, there were 22 cases of poisoning from this source, of which 8 were fatal, 4 in which recovery was doubtful and 10 in which the victim would likely recover. This is quite startling, and yet it is probably, and doubtless, only a partial report. The similarity of arsenical poisoning to some of the diseases of young children, has probably led us to overlook many cases of this character, and the general indisposition on the part of the medical profession and those otherwise concerned, to report such cases contributes still further to the conclusion that this is a greater source of danger than we are willing to admit. We have a committee on the Sale of Poisonous and Habit Forming Drugs, and we suggest to that committee, the consideration of a section in any proposed law they may devise, designed to restrict the sale of any compound intended for the destruction of insects, vermin or other pests, which may prove to be injurious or possibly fatal to human life. It is no defense to urge that a large quantity of any such poison is necessary to kill a child, for it is well known that children do not exercise any very great caution in the consumption of such compounds. Neither will it suffice to urge that the compound is distasteful, and for that reason will not be attractive to children; a child will likely eat or drink anything, which fact is well known to any physician or parent with a reasonably broad experience in the handling of children.

THE VOLTA BUREAU AND THE DEAF.

As a rule, the deaf who have been educated, and many who have had by force of circumstances to educate themselves, are entirely self supporting, and many of them highly successful in their chosen vocation. Their one deficiency seems, in many instances, to have brightened their remaining senses. The State has thoughtfully provided for the education of those deaf children not able to pay their own way through expensive private institutions, but there are many who either do not know of this opportunity, or are not in a position to take advantage of it. Arising to the occasion, Alexander Graham Bell, in 1888, founded and endowed the Volta Bureau, hoping through this agency to bring about a better understanding of the causes and possible prevention of deafness, and to promote the proper teaching of deaf children.

In London, twenty years previously, he taught some deaf-born children to speak and to read speech, and from that time forward the one dominant thought has been to do those things that would aid in promoting the intellectual welfare of deaf children. Then, during the years 1878-1883, he devoted much time in extensive researches in an effort to determine the causes of deafness, and to ascertain to what extent the human race is susceptible of variation by selection. Thus the Volta Bureau was the natural outgrowth of his earnest desire to be of practical service to the deaf.

The Volta Bureau endeavors to serve as a bureau of information to parents, relatives and friends of deaf children, to the deaf and to the hard-of-hearing, supplying helpful suggestions in the form of literature or by letter. Especially does it desire to supply literature helpful to parents who desire to train their deaf children in the home prior to school age. It also sends helpful suggestions to the adult hard of hearing, who having lost the one sense often most important in aiding to gain a living, are liable to become morose and melancholy and, possibly, dependent, if unable to continue in their usual avocations, or in some other congenial employment. Where there is a good command of language and where hearing was lost after the age of 20, there is every reason for believing that lip-reading will prove extremely helpful in a majority of cases.

ANNUAL REPORTS.

The blanks for annual reports will go forward in a short while, and it is to be hoped that county societies will be in a position to make their annual reports immediately. Every year the office of the State Secretary is so overcrowded with these reports coming in at the last moment, that the office force is scarcely able to do its work in peace and security. That errors in plenty are not made under the stress of circumstances, is to be attributed to good luck and conscientious endeavor. We urge that members pay their dues immediately, in order that county society secretaries may be in a position to make the reports without delay, thereby not only saving the central office much trial and tribulation, but insuring much better service.

Secretaries have for some time been making payments, in accordance with suggestions from the State Secretary, in order that the benefits of medical defense may be assured, and some of them have actually paid for their entire membership. To Dr. S. A. Miller of Jefferson, Secretary of the Marion County Medical Society, belongs the honor of being the first

to complete payment for the entire membership of a society. It is quite true that his society is not very large, but it is also true that his members are scattered over a large rural community, and the society, for that reason, operates under difficulties. He has been energetic and enterprising, which accounts for his success. We are glad to extend him this slight recognition.

We desire to reiterate one point. The benefit of medical defense, than which we offer none more important to our members, may possibly hinge upon the date of payment of annual dues, not to the State Secretary, at the time the annual report is sent in, and as of January first, but to the county secretary. The Council on Medical Defense is in charge of a trust fund, and while, as we have before said, the present ruling is that any member noted on the annual report as in good standing March 31st, is entitled to medical defense for the whole time, it is possible that should a test case be made, the courts might rule that the county society secretary is the agent of the State Association, and that the date of payment of dues to him, therefore, rules. If this should be the case, and a member should pay his dues to his county secretary on February first, he would be unprotected for any malpractice suit filed for an incident occurring during the month of January. We cannot too strongly urge that members pay their dues without further delay. During the month of January dues were paid for 212 members.

ANOTHER QUACK CONVICTED.

For many years Texas has been infested by a notorious quack by the name of Crutcher, Dr. Forrest B. Crutcher, to be exact, and his methods have been as enterprising as unethical. His advertising methods have been bold, and his promises beyond all reason. He has doubtless made money, although his wanderings have been devious. It seems that he is a legal practitioner, and for that reason rather difficult to reach. We have not yet reached the point in this State where we can establish such methods as gross and unprofessional conduct, such as is doubtless intended by the Medical Practice Act. However, the enterprising secretary of the Hays County Medical Society, Dr. L. L. Edwards, has succeeded single handed and alone, in securing the conviction of the gentleman in question, on a charge of swindling, securing a verdict of guilty with a penalty of fifteen minutes in jail and a fine of $10.00.

It seems that a young man of the neighborhood had taken his wife to the noted doctor, who immediately told her that she had a tumor. She had no tumor that could be discovered by her family physician, who told the husband that if he would also consult the doctor, it would transpire that he too had some serious trouble, although he had actually never been sick in his life. The husband made the experiment, and his case was pronounced one of "nephritis," which he was assured was a forerunner of "Bright's disease," and that in two months he would be dead unless he took his (Dr. Crutcher's) treatment. The urine of the would-be victim was subsequently tested, and proved to be negative in every particular. It is really an easy matter to secure conviction in such cases, if there is a conscientious set of officials and good jury can be secured. And be it said, that this is an obligation the medical profession owes the public, if not its own cause; the public really has no way of knowing the truth of assertions made by the advertising quack.

ANOTHER INSTANCE OF FRAUD.

The extent to which medical fakers will go in defrauding the people is well illustrated by a case just come to our attention. A faker who claims to be a resident of Dallas, has recently worked Milam County, and succeeded in collecting a fee of $95.00 for a pair of glasses and a couple of prescriptions, from a thoughtless victim. It seems that this case was diagnosed through the means of a special lens, which caused the patient to see double. It was carefully explained that the fact that the vision was double clearly indicated the existence of a serious and likely fatal disease, which could be easily corrected by another pair of glasses, and a little treatment. The glasses afterward proved to be of no value, from the standpoint of refraction, and the prescriptions were equally fraudulent. These are not isolated examples, and really the situation generally is such as to demand the attention of the whole people.

Still, we can hardly blame the medical profession for holding its peace under the circumstances, however aggravating they may be, when we consider the complacency of the public in view of the many and most unreasonable cults that are accepted as a matter of fact, and as worthy agencies of health, to be selected from according to the predilection of the individual. Inquiry might be justly made as to the difference between a charge for "osteopathic" or "absent" treatment, and an equally unwarranted charge for a couple of pieces of window glass, cut to fit a frame, or some other ingeniously devised method of appealing to the credulity of the ignorant and unsuspecting public.

The optometrist would urge this circumstance as good reason for the passage of the so-called optometrist bill. The better way to correct the evil would be to prosecute for fraud or illegal practice of medicine.

ORIGINAL ARTICLES.

DEEP ROENTGEN THERAPY IN UNFAVORABLE SURGICAL SITUATIONS.*

BY

E. H. SKINNER, M. D.,

KANSAS CITY, MISSOURI.

Roentgen therapy in massive measured filtered doses is entirely different from the fractional *x*-ray exposures with which we have all become familiar. It is so different that there is no comparison in therapeutic effect of the old and new Roentgen dosage. Certain advances in apparatus and technique are responsible for this increased usefulness and efficiency of Roentgen therapy, the most important feature being the pure electron tube of Coolidge. The Coolidge tube will produce Roentgen rays of high penetration and in sufficient quantity, and will maintain these factors indefinitely. The use of aluminum and other substances for filtering afford protection to the skin. The cross-fire method of focusing the tube permits one to pour an enormous *x*-ray dosage into the desired part of the body. High powered transformers produce uniform currents to excite the tube.

It has long been an established fact that the Roentgen ray had certain definite tissue effects. For instance, it has a decided effect upon embryological cancer cells; it destroys the tunica intima of blood vessels; it retards the activities of glandular parenchyma and increases the connective tissue elements in glands.

While these effects have been known for some time, it has been impossible to safely attack pathological structures with the effects in mind until the previously mentioned technical factors were combined to afford protection to the patient.

It has been the experience of nearly everyone of late years, that the Roentgen ray was a treatment of choice in superficial epitheliomas of the face, especially that area between the eyebrow and the lower lip. In other portions of the body and other degrees of malignancy, there has been up to the present time no reason for accepting the Roentgen ray as a primary remedial measure.

Whether the newer *x*-ray tubes which will give such unlimited quantity and quality of ray will ever serve alone, without surgery, is a problem for the future to determine. Certainly, at the present time, we cannot countenance in the least any dependence upon the Roentgen ray primarily in carcinomatous conditions, other than in the small area previously indicated—the face.

There are, however, certain new growths, both benign and malignant, where surgical removal is not to be chosen if any other remedial agent is available. Often the surgical situation is so unfavorable that the patient is permitted to go untreated unless the surgical consultant is familiar with the possibilities of deep Roentgen therapy.

Such great potency of ray requires, therefore, careful attention to filtration and protection. The cross-fire focusing of the tube and multiple points of skin entrance to a tumor mass, serve to avoid skin irritation and permit the attack of tumor masses with gigantic doses of penetrating rays.

The effect of such large doses upon the patient's strength and recuperative economy may be so profound that care must be exercised, for a patient may become so toxic that the general health may be jeopardized at the expense of the local success. Particularly is this true in attacking large glandular tumors, where the internal secretions are disturbed, and in inoperable cancerous conditions with ulcerated areas.

I may say, right here, that when I advise Roentgen therapy in the following conditions, that the older methods of divided doses or with ordinary tubes is not recognized as deep Roentgen therapy—I insist upon its use in massive, measured, filtered doses, with tubes of fixed penetration and quality. This requires the courage and assurance of experience and training.

Let us catalogue briefly the situations where the Roentgen ray may be expected to achieve results.

Hemangiomas and Lymphangiomas: These similar types of growth are distinctly unfavorable surgical situations—especially the hemangiomas or naevi about the eye and face. Their obliteration surgically is always problematical and always attended by scarring and disfigurement. Lymphangiomas of the lower lip and tongue are particularly mean situations but the gradual recession by involution after a series of deep doses at about monthly intervals, is most gratifying.

Leukemia and Splenic Anemia: There is hardly any tissue so sensitive to the Roentgen ray as the spleen and the bone marrow. These highly specialized tissues respond to deep filtered rays and the course of the disease is checked—note that I do not say cured—in a manner far superior to the older medicinal therapy, to surgical attack or the newer Benzol. The recent flurry in Benzol therapy seems on the wane.

Hodgkin's Disease: The surgical removal of glands in this condition does not cure. It is

*Read by invitation before the Section on Surgery, State Medical Association of Texas, Fort Worth, May 5, 1915.

impossible to completely remove all the glands. Their return is speedy. Deep Roentgen therapy is just as potent here as surgery; it attacks all glandular tissue in its path and produces a fibrosis of the glandular structures, which prevails over a much longer period than surgery.

Goitre and Prostatic Enlargement: There is only one type of growth in these glands where the Roentgen ray is to be chosen and that is the simple hyperplasia—exophthalmic goitre at puberty is in this group. Where the growth is cystic, colloidal, fibrotic or infectious, the ray is not a treatment of choice. I would not treat any goitre after the age of 20 to 25 and I would expect prompt relief in prostatic hyperplasia or return the patient to surgery. In the active hyperplasias of the thyroid in puberty and up to 22 years, the ray can achieve brilliant results. If the Roentgen therapy proves unavailing the surgical attack can be instituted any time without embarrassment.

Tuberculous Adenitis: While this condition is still considered purely surgical by many unfamiliar with the advantages of Roentgen therapy, the various reports from authoritative sources and my own experience, force me to advise serious consideration of the possibilities of the Roentgen ray, because the ray will search out and treat the tuberculous glands beyond the reach of the knife. Quite naturally, in fluctuating glands a drainage incision will be necessary.

Enlarged Thymus: This is one of the most brilliant fields for Roentgen therapy. In one or two treatments the condition is relieved. It is necessary to attack the thymus carefully because one does not care to produce a complete involution of this gland at too early an age.

Fibroma and Myomas of the Uterus: "In the treatment of non-malignant neoplasms, such as fibromata, the treatment by *x*-rays alone has been attended with a considerable degree of success. The early work of Continental investigators has stimulated work in the same direction in this country, and results are now being obtained in both simple and malignant neoplasms which are of very striking significance, in view of what can be done by the older and better recognized methods of treatment. In many instances of fibromata marked improvement follows the initial series, and after four or five courses of treatment the condition is relieved and the patient restored to good health. Results obtained in these cases by radiation treatment compare very favorably with the results attending operative measures, even when the most favorable cases for operative treatment are included in the cases analyzed.

Pelvic Malignancy: "For malignant disease of the pelvic organs, when at all advanced, radiation therapy holds out as good a prospect as operative measures, especially when the latter have to be, as necessarily they must be, extremely radical if a prospect of cure or temporary amelioration is to be held out. It must not be assumed, however, that radiation treatment holds out a better prospect of cure. Recurrences can and do occur, with about the same frequency as after operation, and the result will be in both groups of cases the same in the end; but when comparing the results consideration must be given to the condition of affairs existing in the interval between the treatment and the recurrence. The treatment by radiations is painless, does not subject the patient to any marked degree of shock, and the immediate effect is apparent in an improvement in health, a diminution or cessation of discharge, and a degree of local comfort.

"It is not intended to convey the impression that treatment by *x*-rays or radium should displace the operative in all cases; far from it. The ideal method is to employ the former in all cases before operation, and again after operation, the latter in every case. Operations, when performed, should be as radical as possible, care being taken to exclude from operation advanced cases, where the surgeon knows that no good can accrue. In these cases *x*-ray should be employed as a palliative measure.

Mammary Carcinoma: "All cases of cancer of the breast should receive prophylactic treatment immediately after operation, and this should be continued at intervals for at least a year.

"A matter of some importance, from a therapist's point of view in these cases, is that no case, however advanced, should be refused the trial of *x*-rays or radium. Some of the most unfavorable cases respond to treatment in a marked manner, while others, which appeared most favorable subjects, hardly respond at all."[1]

It cannot be too strongly insisted upon that every operable case should be operated upon at the earliest possible moment. As soon afterwards as practicable thorough *x*-ray treatment of the whole area should be started. If the condition of the patient and other circumstances permit, there is no reason to delay the commencement of the treatment more than two or three days after the operation, and in treating cases of this kind we should not attempt to confine the rays accurately to the site of operation, but allow as much as possible of the surrounding area to come under the influence of the irradiation.

The great trouble is, that post-operative treatment is not begun soon enough in a large proportion of cases; and in many of them deep extension has commenced, making all efforts

[1]Knox: Radiography, X-Ray Therapeutics and Radium Therapy (Macmillan), p. 378-9.

to prolong life practically futile. There is not the least doubt that immediate post-operative x-ray treatment in carcinoma cases does definitely increase the patient's chance of making a complete recovery, and delay in applying this method not infrequently means that we are throwing away a victim's one chance of escape.

In no class of cases is it more difficult to lay down definite rules for treatment; every case must be dealt with according to the conditions present. The risk of dermatitis is very small when using such thick filter, but as we are giving massive doses we must act with all caution and discretion. On the other hand, only massive doses will be of any avail in a serious case, and we have to remember that if left alone the patient's life comes to an end in a short time, so that while we must not do anything likely to add to his sufferings through x-ray dematitis, we are justified in doing anything short of this that gives him a chance of escape or even an extension of comparatively comfortable existence.

In closing, may I say that the mere possession of proper instruments does not qualify one to perform a gastro-enterostomy. Likewise, an array of tubes and apparatus is not the criterion of a Roentgen operator. Knowledge of Roentgen physics and judgment in the selection of suitable Roentgen dosage, must be combined with technical ability to procure results in Roentgen therapy.

ABSTRACT OF DISCUSSION.

Dr. George D. Bond, Fort Worth, said: Dr. Skinner is conservative, but at the same time he is not without the courage of his convictions. Roentgen therapy has taken hold of Southern doctors more slowly than with those in the North and East, and papers like this one will do much to change such condition. A few of us in Texas have been shooting at the mark as best we could, but this big gun from the North will make a breech in the wall of indifference and prejudice that our smaller weapons will prove more effective. I have made the statement frequently in the last few years before both District Society and State Association, that x-ray was not used in Texas and the Southwest one-twentieth as often as in the North and East, and this statement has not received a single challange. However, this condition has changed until there is not so much disparity at present although there is still much to be desired.

The paper does not admit of any material criticism from me, but I do wish to emphasize a few of the points made. One of my first thoughts is that this paper again shows that the Roentgen ray workers of this country do not wish to displace the surgeon in any way, but rather to aid him and make his work more effective. With reference to skin cancer, it does seem that the antiquated treatment by escharotics would have long since been abandoned in view of the high efficiency of the Roentgen ray, and particularly that it is without the known dangers of the escharotics. One of the most important points I wish to emphasize is the routine employment of the Roentgen therapy after every cancer operation. It does not seem possible that any surgeon in any given operation can feel absolutely sure that there is or is not remaining malignant tissue. It is impossible for him to know the cases that will recur until recurrence, and then the most valuable opportunity has been lost. I would like to remind you that as far back as 1911, *The Journal of the American Medical Association* urgently insisted on post-operative Roentgen therapy in every cancer operation. A rigid adherence to this advice would save many lives that are now sacrificed. The fact that some cases return even when x-ray has been used, is no argument against its use for all the available statistics show that the Roentgen ray used properly will materially increase the number of cured cases in any surgeon's practice. Dr. Skinner's assertion that no definite rules for treatment can be laid down emphasizes his concluding remarks. It takes considerable experience and much intelligent observation to become an expert in this line of therapeutic work. As much individual judgment must be used here as in the field of surgery.

THE TREATMENT OF DEEP SEATED CANCER BY THE ROENTGEN METHOD.*

BY

GEO. D. BOND, M. D.,

Professor of X-ray and Electro Therapeutics, Texas Christian University.

FORT WORTH, TEXAS.

I will devote myself almost exclusively to the treatment of deep seated cancer by the Roentgen method, with heavy filter and cross firing. This is a subject with which we are all more or less familiar, but I think I have gathered some data that may add materially to our faith and confidence in this work. And let me say, parenthetically, that when we are contending with the doubting Thomases of our profession, particularly among the surgeons, we need to keep our faith strong and without apology to any one.

In answer to twenty letters addressed to the leading Roentgen ray workers of the North and East, I have received nineteen replies, most of them ample, full and confident. I here present brief abstracts of each letter, and I hope the spirit of them will infuse you as they have me. The principal questions asked in my letters were in reference to deep seated cancer but, as will be noticed, there are many references also to the treatment of skin cancer.

Dr. A. L. Gray, Richmond, Va., says: "Ninety per cent of the skin cancer cases treated by me permanently healed, and some of them have remained so for a period of twelve years. I have been practicing deep therapy with a Coolidge tube for a few months only. It is yet too early to report results, although I have reason to believe that the intensive filter method offers some hope in cases hitherto considered hopeless. I am convinced that the x-rays have a decided prophylactic effect against recurrence."

Dr. Emil G. Beck, Chicago, Ill., says: "We have used the x-ray post-operatively, especially in cancer of the breast and in many instances have found it to be of considerable value."

Dr. Sinclair Tousey, New York: "More and more surgeons are sending cases for x-ray treatment, immediately after operation and with the happiest results."

Dr. G. F. Pfahler, Philadelphia, Pa.: "I believe

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*President's address, delivered before the Texas Roentgen Ray Association, Fort Worth, May 4, 1915.

Editor's Note:—It is of interest to get the viewpoint of those who confine their practice to Roentgen and radium therapy, and diagnosis, and this most excellently devised address is presented to our readers for what it is worth and in connection with the preceding article by Dr. Skinner, an honored guest of the State Medical Association during its annual session at Fort Worth.

that *x*-ray should cure ninety-five to ninety-eight per cent of epitheliomas of the skin, unless the deeper tissues have been invaded, when the disease must be looked upon as deep seated carcinoma. When one estimates the results of deep seated carcinoma, percentages cannot be given, but having seen apparently hopeless cases by any other method of treatment recover, I believe that the rays should be used in almost any inoperable case of carcinoma, provided the patient is in reach of a competent roentgenologist. In the treatment of sarcoma my records show recovery of about 50 per cent, including all types." He further says, "Post-operative treatment for cancer is one of our most important functions and I think it is appreciated by all of the leading surgeons of this locality (Philadelphia)." He also states that many surgeons are doing operations now that they would not have done except the fact they have post-operative raying to take care of the cancer tissue that the knife can not reach. "It is a rational procedure, for if one can cause the disappearance of advanced carcinoma, as I have often done, there is surely good reason to expect operable carcinoma to be affected more easily by the rays, after most of the growth has been removed."

Dr. J. T. Case, Battle Creek Sanitarium: "I have great faith in pre- and post-operative treatment of breast cases of sarcoma. In a series of perhaps 200 operations we have had only 4 recurrences in 5 years, during which time we have made it a routine all cases post-operative treatment."

Dr. Albert C. Geyser, New York City, says his work along this line has been entirely unsatisfactory

Dr. William S. Newcomet, Philadelphia: "Post-operative radiation is, as a rule, given in all cases where there is the least doubt, and very often some make it a rule in all cases. Pre-operative radiation is, as a rule, only practiced where the tumor does not permit of an operation."

Dr. Roland Hammond, Providence, R. I.: "I do not believe in pre-operative radiation but I am strongly convinced of the value of post-operative radiation."

Dr. Frederick Henry Baetjer, Baltimore, Md.: "As far as superficial growth is concerned, *x*-ray is by far the best treatment, provided the growth is in such a position that metastasis is not liable to occur." He mentions the work of the Germans in deep seated cancer and believes that the treatment is not far enough advanced to place it above surgical procedure. He thinks post-operative *x*-radiation should be a regular procedure. He does not believe in preradiation at all.

Dr. Amedee Granger, New Orleans, La.: "*X*-radiations are extensively used and recommended in the treatment of all skin cancer. In my own practice my results have been most gratifying." He is convinced of the advantage of both pre- and post-operative *x*-radiation, and says that most of the surgeons are convinced of the value of post-operative *x*-radiation and not a few are now recommending pre-operative *x*-radiation also. He thinks the *x*-radiation should begin as quickly as possible after operation.

Dr. George Miller Mackee, New York, thinks that the *x*-ray is almost a certain cure in basil cell epitheliomas, but that in squamos cell epithelioma its action is uncertain. He says a number of surgeons have their post-operative cases treated by *x*-radiation, also their inoperable cases and post-operative returns. He thinks, though, that this is not due to any faith in the *x*-ray but more as a last resort, all with the idea of doing all that can be done. "I have seen some very good results in deep seated sarcomata; the results, in fact, have been so good as to almost warrant the belief that *x*-ray is better than surgery in sarcoma." He speaks of the importance of the technic in the choice of cases and also the combining of other treatments when necessary.

Dr. William Allen Pusey, Chicago, Ill.: "I believe in most epithelioma, *x*-ray is the preferable method of treatment. In other forms of operable cancer, I think it should not be used in place of operation. I think surgeons here largely appreciate the value of *x*-ray in many inoperable cancers and for prophylaxis after operation."

Dr. Louis Gregory Cole, New York: "At present the consensus of opinion is that most cancers, especially those of an epitheliomatous type, respond to *x*-ray treatment, particularly in massive doses. Post-operative treatment is indicated in all cases and pre-operative treatment in cases where it does not delay operation."

Dr. George C. Johnson, Pittsburg, Pa., says he has cases of epithelioma and carcinoma of the skin that have continued cured after twelve years. "Recurrent inoperable sarcoma of the neck, groin, vulva, etc., have in a number of instances disappeared, the patient remaining apparently well up to the present time (these cases 6 to 10 years standing). Many cases of inoperable carcinoma of the breast have been transformed into operable cases by a series of radiation. There is no doubt of the value of post-operative radiation and the most prominent surgeons of this city insist upon such a course of treatment following their operation for malignancy."

Dr. William Benham Snow, New York: "The conservative and thoughtful surgeons of New York City, have paid much attention of late to *x*-ray in connection with surgery. My personal experience in cases of cancer before operation, and the subsequent study of a great many cases, has in the first place caused me to take the stand that no tumor should be removed until it has first been subjected to the use of Roentgen ray, for the following reasons: (1) Many tumors will disappear under the treatment or become so far reduced in a month's time that we may depend upon their successful removal without operation; (2) if the case were to be operated upon and the *x*-ray were first employed, the microscopic foci surrounding the growth would be generally eliminiated, increasing the chances against recurrence, providing the subsequent use of Roentgen ray was delayed, as it often is." He objects to the removal of all glands in the axillary space and beneath the pectoral muscle; he believes they can be taken care of by *x*-ray exposure.

Dr. Edward H. Skinner, Kansas City, Mo.: "We are having most satisfactory results in the treatment of epithelioma of the skin, and of other so-called inoperable deep seated conditions, including sarcoma." He is not impressed with pre-operative and does not seem to be doing much post-operative raying, but he is doing a great deal in the therapy of inoperable cases.

Dr. Clarence E. Skinner, New Haven, Conn.: "(1) X-radiation is a method of election for all superficial cancers. (2) In breast cases and all deeply located processes there should first be operation then *x*-ray. (3) The only cases for *x*-ray alone, in deep seated cases, are those that are not operable. (4) Inoperable cases may be made operable by *x*-ray. (5) Post-operative raying should begin as early as possible and kept up over a long period. Two of the surgeons of New Haven have used this plan as a routine."

Most of these authorities are familiar to all of us, and most of them are connected with high grade institutions for medical teaching, and many of them with the larger hospitals of the country. It will be noted also, that many of the leading surgeons of

this country accept the position taken by these roentgenologists.

You will notice that the position taken by Dr. Snow is decidedly more radical than that of any of the others. At present I am personally not brave enough to indorse his position. Neither have I any disposition to say that future experience will surely discredit him. In Europe and especially in Germany, this radical position is taken by many roentgenologists and some surgeons. They would replace many operations with *x*-ray alone. Probably the most radical of these is Professor Bumm, Professor of Gynecology, University of Berlin and Gynecologist to the Crown Princess of Germany, and who has been one of the leading surgeons of Germany for some years. It is to be inferred that he is not a roentgenologist himself, but directs the work of others.

He would use the Roentgen therapy in place of surgery in nearly all pelvic cases and all breast cases "that were without evidence of pressure" (his own words). He gives a very elaborate technic, but to all intents and purposes it is not very different from the heavy filter and cross fire method practiced by American roentgenologists.

For the present, at least, this is entirely too radical for this country but there is one matter that is imperative. There should be more publicity for Roentgen treatment as an aid to surgery in the treatment of cancer, thereby inducing many to submit to operation who now refuse.

Most surgeons now admit that many of the operations on advanced cases, as formally practiced, have hastened the end and the public observation of this fact makes many afraid of all cancer operations. If they are advised that there is something new that will help to make the operation more certain of permanent relief than in the past, the advice of the surgeon for early operation will bear more fruit.

Our Society and every Roentgen Society should declare emphatically for equal publicity for Roentgen ray treatment as that given to surgery.

HODGKIN'S DISEASE.*

BY

J. B. SMOOT, M. D. AND W. B. CARRELL, M. D.,

DALLAS, TEXAS.

New findings in Hodgkin's disease have naturally stimulated a general interest in the subject, and we shall for that reason review briefly the development of our present knowledge of the disease, and submit a report of two cases.

Much of the work has been directed to histological studies. By some the disease has been interpreted as inflammatory in nature, while others, among them Gibbons, Coley, Martin and Oliver, have regarded the process as distinctly neoplastic. Oliver, in 1913, reported a comparative study of 11 cases of Hodgkin's, 23 of lymphosarcoma and 13 of endothelioma. Working on the hypothesis that two of these are recognized tumors, he undertook to prove the similarity of Hodgkin's, both as to pathological and clinical behavior.

In the lymphosarcoma cases he found a lawless proliferation of atypical lymphocytes, invasion of capsule, veins, etc.; in endothelioma, proliferation of endothelial cells, and, to a lesser extent, of lymphocytes, with invasion of capsule, veins, etc., and in Hodgkin's disease there was an overgrowth of both of these cells and also of a third, the reticular cell, all proliferating to an equal degree with invasion of vein, etc.

This picture enabled him to classify a tumor according to its chief cell. If the atypical lymphocyte predominated it was a lymphosarcoma; if the endothelial cells were in the majority, then an endothelioma. When there was a similar increase of both, along with the reticular cell, the diagnosis of Hodgkin's was made.

In concluding, Oliver maintained that: On account of the (1) similarity and in cases the identity of the histology picture, and (2) the early and constant development of malignancy, i. e., invasion of capsule and veins, and ultimately true metastasis, Hodgkin's disease should be classed with neoplasms and especially with lymphosarcoma and endothelioma.

Opposed to this view were those who believe the disease to be of infectious origin. Hilton Fagge, in 1874, called attention to the similarity between Hodgkin's and tuberculosis. Sternberg, in 1904, taught that it was a manifestation of an atypical tubercle organism. Reid, Ziegler and Adami did not accept the tuberculous theory, but were convinced that the gland reaction was inflammatory and predicted the discovery of a causative bacteria.

Frankel and Much, in 1910, isolated an organism from an enlarged gland in Hodgkin's disease, which they believed was a type of tubercle bacillus. This, however, proved to be the same organism observed by Negri and Miermet in 1912, and simultaneously by Bunting and Yates, who reported their findings in 1913. Billings and Rosenow have since confirmed the work of all of these observers.

This organism, Corneybacteria hodgkini, is a polymorphic diphtheroid bacteria, gram positive non acid fast, and is obtained from the early glands, usually in pure culture and from the older glands, frequently with an associated coccus, which Rosenow suggested may be a form of the polymorphic bacteria.

Steele reported two cases in which the glands yielded a culture of this organism. One a frank case of Hodgkin's, the other a lymphatic leukemia. Finding it in the latter condition is an interesting observation, since Yates had one patient develop a temporary lymphatic leukemia during the course of Hodgkin's disease.

In connection with this discussion we want to report some cases, showing lantern slides of the glands *in situ*, cut sections and blood charts.

*Read before the Section on Surgery, State Medical Association of Texas, Fort Worth, May 5, 1915.

Case No. 1.—O. W., Denton, Texas, age 21. Referred by Dr. Milwee of Dallas.

Family history: Father's uncle died from a cancer of the chest wall. Mother's father had tuberculosis and a tuberculous family history.

Past history: Had measles, 18 years ago and mumps 10 years ago. Had a number of teeth decayed 6 years before. They were attended to and there was no recurrence. Four years ago he refused to have his tonsils removed, and has suffered tonsilitis at intervals since.

Present illness: In August, 1914, he noticed a small, hard mass in the right side of the neck, slightly movable. This mass has gradually increased in size until the present time. There has never been any pain and the patient thinks not any fever. He has lost probably 10 pounds in weight, but continued farm work until November 1st, when the gland was the size of a small orange. He was then given Coley's fluid every two or three days, with severe reactions, for a period of 7 weeks. This did not affect the gradual growth of the tumor. He then had *x*-ray exposures for 3 weeks without improvement.

Examination: Strong, well nourished boy, weighing 130 pounds. There was a large, firm mass, the size of an orange extending from the lower angle of the jaw to the mastoid process and then downward to within one inch of the clavicle. On the lower border could be felt two or three distinct glands, merging into the mass. There was slight fluctuation on the most prominent part. The skin moved over the mass except at this point. In the region of the tonsil the mass bulged in to the pharynx, beyond the median line. Temperature was 99.4° at 3 p. m.; next day 99.2° and 99° on the two following days. There were also two or three enlarged glands on the left side of the neck, smaller in size. *X*-ray shows moderate enlargement of the mediastinal glands. Wassermann reaction was negative; 1/8 mg. tuberculin also negative. We advised removal of a section for microscopic examination.

Under cocaine the fluctuating area proved to be semifluid, necrotic tissue, filling an area the size of a pecan. The tumor was otherwise firm. The wound closed, and primary union resulted.

The excised specimen was submitted to Dr. Black of Dallas, who reported it not tuberculous, but otherwise indefinite.

Five days later an entire gland the size of a bantam egg was removed from the other side, on which Dr. Black reported positive Hodgkin's and prepared a vaccine.

Case No. 2.—Mr. A., age 47. Came to the outdoor clinic in May, 1914, for enlarged glands in the neck. Until this illness he had been a strong, healthy working man. In October, 1912, he noticed a small, movable mass in the right side of the neck, near the angle of the jaw. Soon there were others and all increased in size. One year after onset, similar glands appeared in the other side of the neck. Up to this time the patient had continued work, but had not felt well. He had lost 15 pounds in weight. The glands were confined to the cervical region, were discrete and movable.

He was advised to submit to an operation and on June 1, 1914, the glands from one side were removed by Dr. Boyce. Dr. Black examined the specimen and reported Hodgkin's disease, but did not get a culture. The patient was soon lost track of but again came under our service at the clinic, in April, 1915, in the interval having had one side operated twice and the other once.

Examination at this time showed numerous glands in both sides of the neck, ranging in size to that of a tangerine orange, all discrete and movable. He had lost 60 pounds in weight and showed marked anaemia. From the above pathologic report and blood picture as shown below, the disease was diagnosed Hodgkin's and the patient sent to the hospital for treatment.

Bunting is convinced that through some local nidus, such as the tonsils, diseased gums, intestinal mucosae, etc., the toxins and later the bacteria, filter to the lymph glands and produce the reaction. In case No. 1, the primary infection was probably in the tonsil.

The symptoms for which the patient seeks advice is the glandular enlargement, beginning usually in the supraclavicular chain, but possibly anywhere in the lymphatic system.

As was in these cases, the early gland is usually single, with subsequent involvement of others in the same and later in different chains. They are discrete and movable but in late cases the periadenitis causes coalescing of glands and fixation to the skin. This condition existed in case No. 1, but not to the extent it did in Case No. 2.

In the matter of differential diagnosis, tuberculous glands are closely simulated in many cases.

The fusion of glands with softening, suggested this in Case No. 1, but generally the tendency for the glands to remain discrete and movable in Hodgkin's disease and for tuberculous glands to coalesce early, adhere to the skin and break down, helps to distinguish them. The blood picture, as will be shown subsequently, is also a valuable adjunct, except in that type of tuberculous gland which is suppurating, as in Fig. 3, however, in these the clinical difference is quite sufficient.

From neoplasms it is often difficult to differentiate except through cut section and cultivation of the organism, though Bunting is content to rely on a blood examination.

The pathology of the disease has been discussed to some extent in connection with Oliver's findings, but in addition the gross specimen shows in early cases a soft translucent gland, with a thin capsule, which later becomes firmer from fibrosis.

On microscopic section, a proliferation of the three types of cells mentioned is shown with infiltration of eosinophiles and polynuclears. Gibbons says that cell proliferation may start in any one of three places, the germ center, endothelium of the sinuses and reticulum, and which ever is most active will determine the type of proliferation.

Dr. Bunting has studied the blood picture in a series of 25 cases, and has reproduced the primary picture in monkeys inoculated with the organism. He finds a deviation from the normal in all cases and from this data classifies them in two groups, (1) those of one year or less duration, which show a normal or slight increase in total count, a decrease in neutrophiles and eosinophiles and an increase in trans-

itionals; (2) the advanced cases, which show a sharp rise in neutrophiles and diminution in all other elements except transitionals.

It is well to add that toward the end of the first period there is a distinct eosinophilia, which, with other elements, increase during the second stage. (See charts for further detail, the first, a partial list of Dr. Bunting's cases; those following, cases reported above.)

Dr. Yates states without reservation that a differential blood count is the quickest and safest way to make a diagnosis; that he has on several occasions attempted to confuse Dr. Bunting, but has not done so, except in one case, which was complicated by a terminal infection.

As to treatment, since Rosenow perfected the technique for preparing a vaccine from an excised gland, most cases are given such an autogenous vaccine. The dosage varies as it does with other vaccine therapy, and is simularly given.

	Case No. 1	Case No. 2
Sex	Male	Male
Age	21	10
Apparent duration	4 Mos.	1 Yr.
Leucocyte count	7,500	9,500
Neutrophils	51.2%	56.2%
Eosinophils	3.2%	8.6%
Basophils	1.6%	5.4%
Small lymphocytes	25.4%	16.4%
Large lymphocytes	10.0%	7.4%
Large mononeuclears	.....	.....
Transitionals	8.6%	0.11%

CHART No. 1—GROUP No. 1, BUNTING.

	Case No. 1	Case No. 2
Sex	Male	Female
Age	30	52
Apparent duration	1 yr. plus	2 Yrs.
Leucocyte count	10,000	100,000
Neutrophils	79.4%	89.2%
Eosinophils	0.2%	0.0%
Basophils	0.4%	0.0%
Small lymphocytes	0.8%	2.4%
Large lymphocytes	.....	1.0%
Large mononeuclears	3.4%	0.6%
Transitionals	10.8%	0.4%

CHART No. 2—GROUP No. 2, BUNTING.

January 1, 1915—March 1, 1915.

	Case No. 1	Case No. 2	Case No. 3	Case No. 4
Sex	Male	Male	Male	Female
Age	19	19	47	37
Apparent duration	5 mos.	5 mos.	2½yrs.	.....
Leucocyte count	8,200	14,000	39,000	12,000
Neutrophils	65.0%	78.0%	82.0%	82.5%
Eosinophils	3.0%	4.0%	1.0%	.....
Basophils	.....	2.0%	2.0%	3.0%
Small lymphocytes	20.0%	4.0%	2.0%	5.0%
Large lymphocytes	10.0%	2.0%	4.0%	6.0%
Large mononeuclears	.....	1.0%	.....	1.5%
Transitionals	.....	10.0%	90.0%	11.0%

(Red cell count 250,000.)

CHART No. 3—CASES REPORTED IN THIS ARTICLE.

In addition to tonics and general hygienic care, practically all of the reported cases are given exposures with a high frequency tube, in conjunction with the vaccine treatment, because the results from the former have not justified discontinuing the rays, which are known to be of some value.

Billings and Rosenow report a rapid reduction in size of glands, with general improvement, in their series of hospital patients, with one apparent cure. Other patients treated away from the hospital have not progressed so favorably.

Case 1 was given an autogenous vaccine from January 15th, pushing the dosage as rapidly as reactions would permit.

There was no appreciable effect on the gradual growth of the tumor, which terminated the life of the patient, March 30th, by pressure and toxemia. There was no post-mortem examination.

Case 2 had five doses of a polyvalent vaccine, in sensitized horse serum, prepared by Dr. Gaarde of Chicago, for Dr. Billings. The first dose, 200 m, gave a nice reaction. There was a reduction in size of the glands but the patient would not take nourishment and died April 27th, from exhaustion.

In conclusion, one is justified in saying that Hodgkin's disease is a definite pathological entity, produced by an infective organism, B. hodgkini, presenting a fairly constant blood picture, and with prospects of being successfully treated by vaccine therapy.

ABSTRACT OF DISCUSSION.

DR. W. W. GRANT, Denver, Colorado, said: Probably no more interesting subject is before the profession today than Hodgkin's disease. Recent investigations by Negri, Merimet and Bunting, Yates and Rosenow, of Wisconsin and Chicago, have revealed something new concerning the disease. They have isolated an organism from the diseased glands which is designated a diphtheroid bacillus. The same bacillus is found in the mouth and tonsils of all such patients. Whether it is the specific germ of the disease, is not yet known. It is significant that diseased and enlarged tonsils precede or accompany every case of Hodgkin's disease. It is hard to avoid the conviction that the tonsil is the medium of infection of the neck glands in this disease. The early diagnosis is very important, for the prognosis, at present bad at best, is still more unfavorable when the infection has extended beyond the neck and axilla to the spleen and lower lymph glands. The old theory that it is a form of tuberculosis must be abandoned. The individual, clinical and family history, and scientific tests, will settle the diagnosis as to tuberculosis. Diagnosis, therefore, by exclusion, is an important step, and finding the peculiar diphtheroid bacillus from tonsils or glands is equally significant. At this stage, Bunting, Professor of Pathology in the University of Wisconsin, claims that he can make a diagnosis by an examination of the blood, which is characteristic of this disease. The blood picture, therefore, is interesting and valuable as an aid to diagnosis, and should be employed. The disease occurs usually in young subjects. The treatment has been as unsatisfactory as our knowledge of the disease, death occurring in about three years.

The last word on the subject is that the etiology is still not settled, while the most thorough treatment is extirpation of the glands, autogenous vac-

cine, made from the glands, and the use of the hard x-rays, both for therapeutic and prophylactic purposes. Along this line, I have been treating one case for two and half years, with promising result. Coley maintains that the disease is a form of sarcoma, and he treats it with the vaccine made with the streptococcus and bacillus prodigiosus. I used it for four months in my case with the simultaneous use of the diphtheroid vaccine. The future is hopeful in the treatment of this most formidable disease, though it is true that, so far, there is no specific treatment for it.

Dr. James E. Thompson of Galveston, said: I had the privilege of seeing case No. 1, mentioned in Dr. Carrell's paper, when I was in Dallas a few months ago. In the stage of the disease present at that time, it appeared to me to belong, clinically, to the group of cases commonly known as lymphosarcoma. Both sides of the neck were involved. The mass on the left side was a single, large, infiltrating mass. There were a number of discrete glands present in the lower portion of the right side of the neck. The case was clearly inoperable.

Cases of Hodgkin's disease have always had a very great fascination for me. I have seen quite a number of cases during my professional career, but like everybody else I have never seen one recover. It has been my custom to submit all of them that were operable to early operation and I have had some curious experiences. In one instance, I wounded the thoracic duct during the enucleation of the glands from the lower portion of the left side of the neck. No evil results followed this accident. The duct was seized and ligatured and convalescence was uninterrupted. The most interesting cases that have come under my care have been those where, after operation, the patients have consented to take arsenic for a long period of time. These have been followed by the best results and in a number of instances, life has been lengthened for quite a long period.

In one case I removed a large mass from the left side of the neck, which necessitated the removal of the internal jugular vein and sympathetic nerve. The vagus nerve was dissected from the growth. My operation was the second one, the first having been performed some six or eight months previously, when it appeared that a number of discrete glands had been shelled out of the neck. Arsenic was administered religiously, with the result that the patient had no recurrence for a period of fifteen months. For two months before the recurrence made its appearance, he had abandoned the use of arsenic, so it is a fair surmise that the recurrence resulted from the disuse of the arsenic. Arsenic was resumed and the growth was kept in check for almost another year. At the end of this time, arsenic was abandoned again, and was not resumed until the growth had reached quite a large size. The case eventually proved fatal.

It is a very difficult matter to classify the lymphatic growths accurately, from a clinical standpoint. Many cases of Hodgkin's disease show discrete glands that will shell out like potatoes. The majority of the cases in the early stages are attended by discrete enlargement. In the later stages the glands fuse together, and very often before a fatal termination it is almost impossible to distinguish a glandular enlargement from one of lymphosarcoma.

We have in the museum of the University of Texas, a specimen of Hodgkin's disease that was removed from the neck, where it would be impossible, from a microscopical standpoint, to make the distinction between it and lymphosarcoma. There were a number of glandular enlargements met with, that in the initial stages appeared to belong to the class of Hodgkin's disease where the glands are discrete and change their type when they recur. The recurring growth is much more cellular and conforms to the type of sarcoma. Each time they are removed they become more cellular and more malignant. Some of these growths are pronounced by pathologists to be endotheliomata. I have met with a number of cases of this nature, where the period between successive operations became successively shorter and where the final growth has been clinically typical of lymphosarcoma.

It is too early yet to speak of the value of vaccines in the treatment of Hodgkin's disease. Very brilliant work has been done by Bunting and Yates and by Rosenow, but so far we do not seem to have arrived at any efficient method of curing this disease. On this question we must withhold our judgment.

SOME COMPLICATIONS FOLLOWING ABDOMINAL SURGERY.*

BY

M. M. WALKER, M. D.,

WICHITA FALLS, TEXAS.

All of us who have done surgery and are doing surgery, have either had or will have sad experience due to some untoward circumstances or unlooked for complications. Upon the shoulders of those of us who may be classed as beginners in surgery the burdens of these complications fall the heaviest, and we are the ones who have the hardest time and the greatest embarrassment trying to explain to relatives and the laity the circumstances of the unlooked for, unheard of and to them inexcusable circumstances which carry off our patient after all danger is apparently over. The subject covers such a broad and unlimited field that I shall take up only the most common and dangerous sequela, and I shall consider briefly the dangers of anesthesia.

Special attention should be given to the psychic condition of the subject, as I believe the mental treatment or preparation for the anesthetic is as important, if not more so, than the medical. The operator who ignores the fact that children and nervous adults require some psychic attention, runs the risk of having serious consequences to deal with. We have all seen the fears of a conscious patient develop rapidly into the terrors of the semi-conscious, thereby producing a profound nervous shock. We are aware that insignificant circumstances frequently swing the balance in favor of the patient toward death. It is, therefore, important that we put forth every effort to see that our patient is started under the anesthetic in a state of tranquility. The existence of tranquility should not be assumed by the operator or anesthetist, as the majority of patients will not admit fear. However, a careful examination of the heart will show an acceleration beyond the control of the patient, indicative of a highly nervous condition, while showing no outward manifestation of fear.

If the nervous mechanism has been taken out of the patient's control by proper preliminary medication, the mind will be in a condition where it can readily be brought under the influence of the anesthetist, by well-timed suggestion. It is possible, by proper medication, to bring the patient to a state of partial narcosis, thereby lessening the amount of the anesthetic usually required, and permitting the patient to be kept between a light and deep narcosis without disturbing the dangerous vomiting center. Every drop of anesthetic that can be dispensed with will also save the kidneys and lungs a corresponding amount of irritation. The

*Read before the Northwest Texas Medical Society, Mineral Wells, October 19, 1915.

time of administration is not arbitrary, but to be advantageously used the drugs selected should be given in time to obtain the physical effect before beginning the anesthetic. The drugs most commonly used are morphine, morphine and atropine, hyoscine, chloretone, the bromides and whiskey. However, in my opinion, a combination of morphine and atropine, ⅛ to ¼ grain of morphine and 1/150 to 1/100 grain of atropine, the dose to be determined by the condition of the patient and the anesthetic employed; the morphine should be less when chloroform is used, as both morphine and chloroform have a depressing effect on the respiratory centers. I believe this combination is ideal, and the one that will meet the demand in the greatest number of cases. However, there are contraindications to its use, as the extremes of life, acute nephritis and coma.

The most common, dangerous and disconcerting complication of discontinued respiration, can be prevented by producing a proper preliminary narcosis, thereby depriving the patient of the physical control which might enable him, when the second stage of narcosis is reached, to take a deep breath thereby receiving an overdose of the anesthetic. A sudden deep breath will frequently cause a suspension of heart action by forcing into the circulation all the anesthetic vapor in the lungs.

Atropine renders inhibito-respiratory reflexes less liable to occur, and prevents an excessive accumulation of mucus in the throat. There is no doubt about the usefulness of this combination in preventing immediate post-operative pain and shock.

When a condition of shock arises immediately following an operation, the surgeon may find himself taxed to differentiate between surgical shock and concealed hemorrhage. However, a diagnosis should be easily made if we bear in mind that in shock there is a mental depression instead of the stimulation found in early hemorrhage; an absence of muscular tone in shock, which is accentuation in hemorrhage; rapid and shallow respiration in shock; rapid and deep in hemorrhage, and the most characteristic differential symptom, a cold and clammy skin, in shock, pallid and dry in hemorrhage.

I am convinced that the greatest factors in the prevention of shock are economy of time and minimum amount of manipulation of important organs during operation; it has been proven that the fall in blood pressure caused by handling important vital organs, is directly proportionate to the amount of force employed and the time required, that is, the less time employed operating and the more gentle the manipulation, the less shock there will be.

I believe that after shock has developed, the treatment, beyond the ordinary precautions of warmth and position, is practically *nil*. It is very disappointing, after a transfusion of blood or an infusion of normal saline solution, to see a decided temporary improvement pass away in a few hours in spite of our efforts at stimulation. I believe that if there is any treatment for this condition it is direct transfusion of blood. Intravenous saline solution, as well as entroclysis and stimulating enemas are practiced with a doubtful degree of success.

The nervous system being the predominating factor in shock, I believe that if the patient is conscious, especially if conscious of pain, morphine will give excellent results by relieving pain and abolishing reflexes, thereby conserving body energy. Personally, I believe the efficiency of stimulating drugs is doubtful, but should I make a selection of any I would use adrenalin chloride directly in the circulation, as it is the most prompt and reliable vasoconstrictor we have.

Because of the grave prognostic significance, and frequency, post-operative hemorrhage of the abdominal cavity should be guarded against with a great deal more precaution than most of us observe. Any manifestation of internal bleeding should be given prompt attention, for waiting for development of positive symptoms often means the loss of our patient. For secondary hemorrhage of non-septic origin, there is no excuse, as it is always without exception due to faulty technic and carelessness on the part of the operator. It appears usually from a few minutes to twenty-four hours after the operation. Occasionally we have secondary bleeding in a clean case, three or four days after the operation because of the loosening of a thrombus which had temporarily controlled bleeding during the operation, thereby causing the surgeon to overlook the vessel. One of the worst practices and one that will sooner or later get us into trouble, is clamping or ligating tissue *enmasse*. Other causes of hemorrhage are, cutting too close to the ligature, thereby permitting them to slip off; untying or stretching of cat gut, and too much sewing instead of ligating. I think we may frequently have a hemorrhage due to an injury to a blood vessel with a needle, the needle coming through some of the coverings of the artery, forming an anuerism, which subsequently ruptures.

In considering the time when secondary hemorrhage may occur, we will have to consider the obliteration of ligated vessels. This takes place, when aseptically done and without injury to the internal coat and without the formation of thrombi, by an obliterating anergitis and is completely obliterated in a week. The presence of pyogenic bacteria promotes formation of thrombi, thereby retarding obliteration. Therefore, it is impossible to have a secondary hemorrhage in a clean case after the first week. In post-operative hemorrhages due to sepsis, bleeding may occur at any time, but it is usually after the end of the first week and it may develop at the end of the fourth week. A tendency to hemorrhage is very pronounced in the staphylococcic and streptococcic infections. These secondary hemorrhages are very likely to occur after operations on the gastro-intestinal tract and are caused by injury and destruction of the vessel walls by a retrograde emboli originating from infected thrombi. These thrombi frequently have their origin in ligated omentum or mesentery, or they may be due to a degeneration of the vessel, which in turn may be due to the presence of micro-organisms or toxins, or both, in the blood, causing ulceration of the vessels.

The treatment of secondary hemorrhage depends on the ability to deal directly with the bleeding point. No general treatment should be administered until bleeding has been arrested, and then the replacing of the lost blood is the most important consideration. Direct transfusion of blood is the most rational treatment, but as this is seldom practical in our surroundings, infusion of normal salt solution directly in the circulation is the most dependable. I will not discuss the use of stimulating drugs, except to warn against using them until the bleeding has been arrested, then they should be used in small doses often repeated.

In passing, I want to call attention to a complication which, while infrequent, is one of the most dangerous that can arise, one for which we know no cause or treatment and which is invariably fatal, that of post-operative hematemesis, passing over the form that is caused by faulty technic. While it is possible to have a fatal hematemesis following any kind of surgery, even upon the head and extremities, by far the greater number of cases follows operations upon the abdominal viscera. The vomiting usually begins twenty-four hours or more after

the operation, after the patient has gotten over the nauseau from the anesthetic. The vomitus is characteristic, being partially digested blood of a very dark color and an intensely acid in reaction, very little being expelled at any one time, but at frequent intervals. The condition of the patient always becomes very unsatisfactory in a short time, showing profound shock and indicating a powerful toxemia.

The causes of hematemesis are theoretical. It cannot be caused by the anesthetic as it occurs after operations done under local anesthesia. Of course, following operations on the stomach it can be caused by local trauma producing a gastric necrosis, but this will not account for the condition following operations on other abdominal viscera. Von Eiselberg has suggested that it is due to an injury to the omentum, producing a thrombosis of the omental vessels, followed by embolism of the wall of the stomach producing ulceration. To my mind, the most acceptable theory is that of sepsis. However, in some cases there are no general evidences of sepsis. It is possible, though, that the sepsis is of so violent a form that it has no time to develop elsewhere. Cases which show no local evidences of peritonitis are the ones that are so readily fatal.

A very frequent complication, and one which, to say the least of it, is very annoying to the patient, is that of post-operative vomiting. It is more likely to occur in nervous individuals and in patients who have been anesthetized before, and is due to a nervous apprehension.

The deep vomiting center, which is situated in the medulla, is one of the most sensitive of the entire nervous mechanism. Vomiting is very apt to occur after rough handling of the abdominal viscera, in cases in which large abdominal drains are used and in cases of diffuse infection with meteorism. In clean cases a proper preliminary narcosis and the skillful administration of the anesthetic, are the greatest factors in prevention of post-operative vomiting. The less anesthetic employed, the less the liability of vomiting, as there has to be an absorption of a certain amount before the deep vomiting center is disturbed. The use of ethylchloride and nitrous-oxide before beginning ether, has been recommended as useful in preventing vomiting following the use of a general anesthetic. But their efficiency lies, as in the preliminary use of morphine, in lessening the amount of anesthetic used.

I believe that drugs have no place in the control of post-operative vomiting. The patient should be propped up to promote natural drainage of the contents of the stomach into the bowel. If necessary, the stomach should be washed by giving copious draughts of plain water or by lavage with the stomach tube. The establishment of early peristalsis is to be desired.

A complication for which we know no definite cause, and for which there is no satisfactory treatment, is that of post-operative acute gastric dilitation. I believe this complication is not infrequent, and as the symptoms simulate very closely those of acute peritonitis, a great many cases are diagnosed as peritonitis. There is a paralysis of the stomach which permits an over distension with gas and excessive secretion. After the distention develops, the walls of the stomach are found to have become very thin, the mucus membrane congested and hemorrhagic, with areas of necrosis. The same condition with dilitation will usually be found in the upper part of the duodenum.

The symptoms are characterized by sudden onset and rapid development. They consist of severe pain, rapid breathing, very rapid, feeble pulse, which rises rapidly. The temperature will be found subnormal and peristalsis cannot be observed. Thirst cannot be allayed, and drinking aggravates the symptoms. There is always a suppression of urine. Vomiting is persistent but gives no relief. In most instances there is a fatal termination in a few hours, caused by a suspension of heart action due to pressure. All treatment is unsatisfactory, but some cases have been saved by continued lavage of the stomach, rectal feeding and stimulation.

Prevention of post-operative complications should be the first law of surgery. No patient should be anesthetized with a mouth full of dirty teeth. A thorough disinfection of the mouth is a matter of great importance, as pneumonia or gangrene of the lungs may develop from aspiration of decomposed material during anesthesia.

Judgment should be used in the anesthetic used in subjects suffering from bronchial affections, cardiac decompensations, chronic alcoholism, and in aged individuals. In patients of this class if an operation is imperative and a general anesthetic must be used, the patient should be as completely narcotized as possible before beginning the anesthetic. By doing this the amount of general anesthetic is greatly reduced, thereby lessening the dangers of pulmonary complications. The use of systematic inhalation of warm water vapor before and after narcosis, with a mixture of thymol and salicylic acid, has been recommended by some of the best authorities, for the prevention of post-operative pneumonia. Hypostasis should be guarded against by frequent change of position, by seeing that the patient has free and unembarrassed respiratory movement, and by good cardiac action.

Operations upon patients suffering from uremia or nephritis, either acute or chronic, should not be performed under a general anesthetic, except in cases of extreme necessity, then the patient and those responsible for him should be advised of the liability of these complications arising. Surgery upon this class of patients should be done under local or gas anesthesia, if possible, but if necessity requires the use of a general anesthetic, a skilled anesthestist should be employed and the amount of anesthetic used should be kept down to the minimum. The surgeon will further lessen the danger by doing the operation as rapidly as is consistent with good work.

In the treatment of these conditions, an effort should be made to fill the system with fluids by hypodermoclysis, enteroclysis, etc., and then to promote elimination.

There are countless minor complications following abdominal surgery, such as temporary difficulty of urination, constipation, meteorism, gas pains, bed sores, phlebitis, etc. While they are a source of anxiety to the patient and give discomfort, besides being annoying to the surgeon, they are not dangerous.

Peritonitis is always a surgical accident, whether post-operative or otherwise, and is due to the penetration into the peritoneal cavity of the products of an infected area outside of the cavity. And owing to the vast extent of the peritoneum, "being four times as great in extent as the skin" and its intimate relation with all abdominal viscera, this is very likely to occur, and I think does occur very frequently. It is generally taken care of by nature, by being walled off by inflammatory processes. Of course, this cannot occur when the infection is extensive and the virulence great. Then we have diffuse peritonitis, which in post-operative cases usually occurs by breaking up some infected area and permitting the spread of the infectious material.

The dangers of general peritonitis can be obviated by care in manipulation of the viscera in suspicious cases. Nothing should be done that might promote the scattering of infection. A well defined case of general peritonitis will be easily recognized, by the

characteristic pulse, which is frequent, small and of high tension, a pulse simulated only in scarlet fever; by the position of the patient, which will always be found on the back with the legs drawn up; by the severe pain, aggravated by vomiting, and by the characteristic gesture of the patient, who seems to be trying to avoid having anything touch the abdomen.

I will say nothing in regard to the treatment, except that thorough drainage should be established. Remove the source of infection if this can be done without danger of scattering the infection, promote drainage by position, etc. Keep the patient as quiet as possible on opiates, and above everything, do nothing to move the bowels.

SURGICAL ERRORS.*

BY

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Once upon a time a very learned surgeon unburdened his conscience before an assembly of his fellow craftsmen. He told them all about the mistakes he had made through ignorance, through carelessness and through incapacity. They all listened, his friends filled with admiration of his courage and honesty, his enemies with secret delight at his indiscretion. The latter departed to their homes in great good humor saying, "Surely the Lord hath delivered this our enemy into our hands." Tonight, lest I should deliver myself into the hands of my enemies, I feel it incumbent on me to protest that everything that I shall say is pure romance, resting on no more solid foundation than rumor and hearsay evidence. And if perchance I should in my enthusiasm, make any revelations that could possibly be construed to my disadvantage, I most solemnly avow that I have never made an error either in diagnosis or treatment; and further, I declare that I shall defend myself against any evil reports by fathering the incident so misused on the first man who is so uncharitable as to impute it to me.

Errors may be divided into two classes. (1) Avoidable. (2) Unavoidable.

Problems confront us daily that are beyond our comprehension, whose solution cannot be expected until further advances in the allied sciences enable us to approach them from the right angle. It is only necessary to compare our present knowledge of the diseases due to functional disorders of the thyroid and pituitary glands, with that of twenty or thirty years ago, to appreciate the enormous debt clinical medicine owes to chemists and physiologists. The full significance of excess or failure in the secretion of the thyroid gland was never dreamed of by Graves or Sir William Gull, when they described the diseases now known as exophthalmic goitre and myxoedema. When Marie described the disease to which he gave the name acromegaly, and found that it was so often associated with overgrowth of the anterior lobe of the pituitary body, he never dreamed that "symptoms complex" would be discovered having a definite relationship to excessive or diminished secretion. It is only within the last decade that we have laboriously built up the symptomatology of gigantism as a result of excessive secretion and infantilism, and obesity and lack of sexual development as a result of diminished secretion. Much as we now know about the chemistry and physiological functions of these glands, who dare claim that we have done more than scratch the soil?

Careful study of symptoms and their relationship to diseased states is constantly revealing to us new diseases. If we only knew it we are seeing daily examples of diseases which have never been properly described and classified. There is a large unexplored land of medicine waiting for us if we could rub the scales from our eyes and see clearly. Unfortunately, the divine gift of clear vision is conferred on few men. These, God's chosen, have the supreme faculty of separating themselves from their educational environment, and seeing things as they are and not as they appear. The great ma ority see what they are told to look for and many only a part of that. In all charity, no blame ought to rest on any man who, lacking genius and orginality, fails to interpret symptoms which seem to have no correlation.

(1) AVOIDABLE ERRORS.

In discussing avoidable errors I find myself in as great difficulties as I should be placed if I were attempting to deliver a sermon on man's frailties. There is no stupid or vicious mental trait that human flesh is heir to that may not sometimes get the upper hand and warp our judgment when dealing with a surgical problem. We may be careless, idle, hasty, weary, obstinate, easily swayed, stupid or ignorant. Stupidity and ignorance I shall ignore. The former is hopeless and the latter unpardonable. I believe that the commonest cause of error in surgical practice is a combination of carelessness and idleness. Carelessly conducted examinations are the crying evil of office practice. After a short consultation, during which the patient tries to describe his ailment, and is constantly thwarted by the doctor who prefers a short cross examination, the patient is told to stick out his tongue, and presto, in the shortest possible time, a prescription is put into his hands and he is dismissed. The dangerous nature of such practice is considerably mollified by the self-limiting nature of so many trivial ailments. Occasionally, however, serious tragedies result. Some years ago I was asked to examine a patient who had been told he was suffering from piles. He had been under the care of his family doctor for three years and had been treated all this time without a proper examination. On one occasion the anal margin had been inspected and the ischio-rectal fossa contemptuously punched with the finger, but no digital examination made. I found a large ulcerating cancer of the rectum. I am confident that equally deplorable instances of carelessness can be duplicated by every person in my audience. It may not be feasible to tag every patient with a blood count, Wassermann, and an *x*-ray examination, but it is surely indecent to neglect the simple means of diagnosis that are within everybody's reach and to give the patient the impression that a correct diagnosis has been made. Such behaviour is a serious breach of sacred trust, coupled with dishonesty for receiving remuneration for services that are fraudulent.

Haste in reaching a conclusion is almost as much to be condemned as carelessness. Only when dealing with emergencies can a hasty conclusion be pardonable. By far the great majority of ailments are chronic enough to enable us to study them for days and even weeks before subjecting them to radical methods of treatment. Often cases are brought to me for operation, with request by the attending physician that I operate on the day of arrival, in order that he may witness the operation and lose no unnecessary time. I have formerly been guilty of this practice, in which respect I have a shrewd suspicion I do not stand alone, but now I have reformed. My reformation was the result of a

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number of mistakes in diagnosis. In one case I operated on a movable kidney and found, after the organ was exposed, that a small stone of oxalate of line was present in the pelvis. A nephrolithotomy relieved the patient.

The organ that suffers oftenest from hasty diagnosis, is the appendix vermiformis. The habit of removing the appendix because of pain in the right side of the abdomen is becoming so prevalent that the public is becoming seriously aroused to the danger of this widespread surgical scandal. A few months ago a patient was brought to me for an opinion. The history of the case pointed to the appendix as a probable cause. Following my usual custom, I insisted on a routine examination and eventually fastened the trouble in the pelvis of the right kidney. After diagnosis was made, the husband of the patient asked me if I knew why he had brought his wife to me. On my replying in the negative, he said that he had consulted three other surgeons, who after listening to the history and making a hasty superficial examination of the abdomen, had without hesitation made a diagnosis of appendicitis and suggested immediate operation. Which of us has not made the mistake of removing an appendix when the organ was normal and the kidney at fault, but which of us does not conscientiously try to avoid the same pitfall again? My first mistake of this character came very early in my career. I was asked to operate in another town on a case recently recovered from an attack of acute appendicitis. The patient was suffering from cystitis, which the attending physician attributed to the passage of an impure catheter, during his sickness. At operation, I removed a remarkably healthy appendix. I was puzzled. The cystitis and pain in the right groin continued but both were finally relieved by the spontaneous passage of a small stone from the right ureter.

At times nothing it easier than the diagnosis of right sided abdominal pain, at other times it is impossible to reach a true conclusion. Every organ must be subjected to a careful scrutiny; the liver, gall-bladder, kidney, ureter, ovary, gut, and finally the abdominal wall, peripheral nerves, spinal cord and vertebrae. It would appear that the responsibility of advising operation in the absence of unequivocal symptoms should negative or at least delay operation. The opening of the abdominal cavity is not an absolutely safe operation. Even a simple appendectomy may be followed by adhesions that may prove very troublesome and even dangerous. Yet we find physicians callous enough to advise operative procedures to clear up a diagnosis that could and ought to be cleared up without operation. It would be illuminating if we could make a collection of all the appendices removed during the course of a year, in all the hospitals of any large city, and submit them to the minutest scrutiny by an unbiased pathologist. I wonder what proportion of them would show any real pathology. I have a friend, a minister of religion, who has made it a custom for years to be present at most operations performed on the members of his church. One morning I removed, in his presence, a good, fat, red, succulent, inflamed appendix, gangrenous at its tip. He looked at me and smiling said, "at last, I have seen a real case of appendicitis." This remark, half fun, half grim truth, was a scathing criticism of his experiences.

If appendectomies were necessary in every case of tender caecum and appendix, most cases of neurasthenia and enteroptosis would fall victims. Surely an end must come to this scandal. The public is already tired of the humorous side of this matter. It no longer laughs at the physician of the funny papers. Rumors of graft, dishonesty and unnecessary operations, are being heard on every side. Reform ought to come from within our ranks. If we fail to see the signs of the times, we shall awake some day to find that the people have taken the matter into their own hands and protected themselves from the surgeon's scalpel by drastic legislation.

Of all the curious states that lead to errors in diagnosis, "mental obsession" is the most remarkable. Unlike obstinacy, where a man has already made up his mind and refuses to be convinced by any argument or proof, obsession is a mental state in which the diagnostician is under the influence of suggestion. I have known a physician, after seeing a case of intussusception, cling obstinately to a diagnosis of the same condition in two cases of simple diarrhoea and colic, and refuse to be convinced to the contrary. During the recent epidemic of cerebrospinal meningitis, I saw physicians so obsessed by the idea that their patients were suffering from that ailment that it was positively unsafe for a patient with headache or backache to go into their offices. I have seen this obsession take such ridiculous and obstinate aspects that it amounted almost to lack of common sense. I have met physicians in consultation whose obsession was so strong that no argument could change their opinion. Every headache was a brain tumor; all dyspepsias were ulcers of the stomach, and every uterine hemorrhage the result of eancer. I have even suffered from obsession myself. On one notable occasion I was associated with an excellent internist in a case where I felt completely under the hypnotic effect of blood counts and *x*-ray pictures. The case had shown progressive loss of weight and strength. The blood count showed no great increase in leucoeytosis and very little diminution in the number of red cells. The percentage of haemoglobin was considerably reduced. The examination of the urine showed nothing abnormal. There were no symptoms referring to either kidney or bladder. Each night the temperature was elevated, often to a point as high as 101 degrees. Physical examination revealed a tumor occupying the left hypochondrium. It was very movable. On its inner side a distinct notch could be felt. It was quite tender on palpation. There was marked pain in the region of the tumor. The *x*-ray pictures showed nothing except a very high diaphragmatic dome on the left side, with a translucent rounded area in its hollow. We both became obsessed with the idea that the case was one of splenic enlargement and expected the blood changes to make their appearance shortly. A few weeks were spent keeping the patient under observation. At length an exploratory operation was decided upon, rather against our better judgment. When abdominal cavity was opened, the spleen was found normal, and the tumor turned out to be a hypernephroma of the left kidney.

(2) UNAVOIDABLE ERRORS.

Two men of equal academic attainments rarely stand on the same plane in their capability of applying knowledge. One may possess a logical, well ordered mind and be able to arrange his facts in such a manner as to reach a correct conclusion with unerring accuracy, whereas the other mixes them in a chaotic, disorderly jumble, and either remains in doubt or makes grievous mistakes. It would be unkind and illiberal to blame too severely the mistakes of the latter, if they were made after a conscientious and painstaking examination. It is his misfortune and not his fault, if he is not able to follow the right path. We have no right to expect from an average man extraordinary attainments. But we do demand that he shall put forth the best that is in him and employ modern methods of diagnosis that are within everybody's reach. If this standard is reached, and still an error is com-

mitted, it must be spoken of as unavoidable. That this definition is very liberal and could be made to cover up all grades of stupidity, I am fully aware, but ought we not to be charitable and generous? Is there one of us who has not occasionally made glaring mistakes in cases that were clear enough when viewed from another aspect, or when the mind is more receptive? Do we not all have our good days, our very good days, when we are equal to any task; and our bad days, gloomy days, blue Mondays, when our brains work sluggishly, and every molehill is a mountain?

Failure to take advantage of and to utilize special knowledge that may be obtained through one or more consultations, may be an error of the avoidable class. No man has a right to think that his own verdict is beyond repeal. Apart from the trust placed in him by his patient, he owes it to his self respect and manhood, to seek further light. I have in mind at the present time an obscure case, that has been positively pronounced one of cerebellar tumor. I have availed myself of the services of the best consultants I could find, a neurologist, an anatomist, a specialist in ophthalmology and otology and a pathologist. I append here a short resume of the case to show how conflicting the evidence is and how carefully it must be weighed if I am to avoid the sin of omission or commission. The patient suffers in varying degree from all the classical signs of a lesion of the cerebellum. She has (1) ataxia, (2) atonia, (3) asthenia, (4) tremor, (5) nystagmus and (6) vertigo. Reflexes are increased on both sides of the body, in both legs and arms. There is no Babinski reflex. The reflexes are slightly more evident on the left side. There is slight weakness of the right side of the face (7th nerve). The right auditory nerve is not impaired in function (8th nerve). There is slight dilatation of the right pupil (3rd nerve). Also slight weakness in both external recti muscles of the eye (6th nerve). All symptoms are compatible with a lesion of the cerebellum, near the cerebello-pontine angle, although it is difficult to understand why the 7th nerve should be affected and the 8th and 5th nerves escape. It is also hard to understand how a lesion could miss the 8th and 5th nerves and still be large enough to press on the pyramidal tract of the opposite side. Further, the two most important signs are absent, *viz.*, choked disc (papillary oedema) and vomiting. The patient also suffers only occasionally from headache. All tests for syphilis are negative. It must be clear that the responsibility of giving a final opinion on this case is grievous. It is so easy to be mistaken. The chain of evidence is incomplete and perhaps we are losing valuable time hunting for the missing links. Exploration has been suggested but the idea is abhorrent.

A few weeks ago a very interesting case of a stab wound of the spinal cord came under my care, which presented symptoms almost identical with those shown after hemi-section of the cord (Brown Sequard's paralysis). In addition, certain symptoms were present, about which erroneous impressions are held by many writers. It is generally believed that the deep reflexes in the paralyzed parts are completely abolished in a total transverse lesion, and are exaggerated in a partial lesion. In a general way this statement is true, but it requires some modification before it can be accepted unreservedly. In man, a total transverse lesion is always followed by complete loss of the reflexes and they never return. In other words, there is a condition of absolute flaccid paralysis, which is a permanent condition. If rigidity and spasticity are present, the lesion cannot be considered as a total one, and their presence must be considered as an absolute sign of the escape of some tracts of the cord from destruction. Immediately after a severe injury to the cord, total paralysis and anesthesia often make their appearance and are associated with complete abolition of reflexes. If the lesion is total and transverse, these symptoms will persist without change; but if the lesion is only partial, in the course of time the reflexes will return and signs of rigidity and spasticity will make their appearance. "The essential qualities of the symptoms of a total transverse lesion depend on their permanency."

Another impression that is deeply rooted, is that the spasticity and rigidity are the result of irritation of the cord by blood clot or the presence of foreign bodies, such as bullets, knife blades, etc. Such an interpretation of the cause of the symptoms following injuries has led to many operations, both futile and unscientific. I have among my records, histories of two cases where I was persuaded to remove bullets from the vertebral column and alleviate symptoms of spastic paralysis supposed to be due to pressure and irritation. In neither case did I find the lumen of the spinal canal narrowed. The cord had been injured by the bullet during its passage and some of the motor tracts were destroyed permanently.

I have made it a rule never to interfere in these cases when by *x*-ray examination it can be shown that the bullet is lying outside of the spinal canal, embedded in the vertebrae. In these cases whatever mischief has been accomplished is irremediable; there is no pressure to relieve and inspection will not help the matter. Even in cases where the bullet lies inside the spinal canal, the result of operation is problematical. Severe pain would point to irritation of the posterior nerve roots and would be a positive indication for removal. Excessive spasm would probably indicate not the irritation produced by the bullet but a destruction of some of the motor nerve tracts, followed by descending degeneration.

We must not forget that there is practically no evidence to prove that regeneration ever occurs, under any circumstances, in the tracts of the spinal cord. If we bear this constantly in mind, laminectomy following injuries will be a rare operation.

There is probably no class of injuries where opinions differ so widely as to the justifiability of operation, as in injuries to the spinal cord resulting from fractures and puncture wounds. Thorburn and Murphy are emphatic in their condemnation of any operative procedure in complete transverse lesions, and they look unfavorably on operations in partial lesions, unless it can be shown conclusively that pressure is being exerted on the cord by displaced bone, blood clot or foreign body (bullet). From time to time disquieting papers appear urging operation in all cases and advancing the argument that operation can do no harm even if it does no good. Such a stand is wrong because it is based on false statements. The operation is not harmless. It is a very dangerous one. Further, it is usually useless. There is rarely any bony deformity to encroach on the spinal canal and Thorburn says he has never seen a blood clot in the spinal canal that he could by the wildest stretch of imagination accuse of causing pressure.

In conclusion, I present the following case of stab wound of the right side of the spinal cord, which illustrates some of the points discussed above. It severed the right half of the cord almost completely and conformed closely to the Brown Sequard type of paralysis. It presents many points of interest that will be emphasized in the short case report. The stab entered the back just below the second dorsal spinous process. It was followed by immediate paralysis, and anesthesia on both sides of the body below the level of the nipple (fourth dorsal nerve). Deep reflexes were completely abolished.

A diagnosis of complete transverse lesion was made. The following day the patient was able to move the left leg slightly. Motion improved gradually. Signs of spastic contraction made their appearance. The whole left side was anaesthetic to prick as high as the level of the fourth dorsal nerve. The right leg was paralyzed, as was the right side of the body as high as the level of the fourth dorsal nerve. Muscular sense was also lost. Sensation to prick was present up to the same level. Gradually the symptoms of a partial lesion unfolded themselves, until eventually it was seen to be one of almost complete hemi-section of the right side of the cord. The diagram presented shows the present condition of the patient. The position of the lesion is shown by the black mark, which corresponds to the interval between the second and third dorsal vertebrae. On the right side of the body the following condition exists:

(1) Motor paralysis and loss of muscle sense; spastic paralysis and increased reflexes.

(2) Sensation. Touch, temperature and pain are present as high as the fourth dorsal nerve. There is hypersensitive in this area. A strip of anaesthesia about two inches wide exists above this area, encircling the right side of the body.

The left side of the body showed the following:

(1) Motion is interferred with; there is partial paralysis; can flex and extend the thigh, leg and ankle; movements are weak; reflexes increased; muscular sense not impaired.

(2) Sensation. Pain (protopathic) completely lost as high as the fourth dorsal nerve. Epicritic and thermal sensation (touch and temperature) lost as high as the knee; uncertain between the knee and hip joint; normal above this point.

The *x*-ray pictures show the position of the knife blade clearly. It is evident that the right side of the cord is completely severed and some motor tracts on the left side injured slightly. The question of operation was discussed carefully. The patient was very anxious to have the knife blade removed. I did not believe that the knife was causing any trouble and discountenanced any hope of amelioration. There were no signs of irritation. Eventually I operated and removed the knife blade very easily, being careful not to hurt the uninjured part of the left side of the cord. It is too early to notice any change but the area of epicritic sensations seems to have spread up the left leg.

OBSTETRICS AND GYNECOLOGY.*

BY

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Some time since, before the Fifth-Sixth District Medical Society, at San Antonio, I remarked that I believed the subject of Obstetrics had been and was being neglected by the average practitioner. Every physician, recently from school, knows perfectly well how to perform most if not all of the more difficult operations, but comparatively few of them know how to attend a normal case of labor. One of the main reasons for our indifference to obstetrical work, and why we fail to give it more extensive scientific study is that it is hard work and poor pay, considering the time and responsibility involved, and the laity still believes, as they always have, that anyone is qualified to handle an obstetrical case, when the fact is that a woman in confinement needs the care of the best physician and nurse obtainable.

About all one hears these days upon the subject of obstetrics is "Twilight Sleep" and Pituitrin. As to Twilight Sleep, I do not believe that the use of morphin-scopolamin is at all justifiable in a great many cases. In other words, I believe that a perfectly normal case of labor is a physiological process and should not be interfered with either with drugs or too much manual manipulation, any more than a normal digestion should be so treated.

Pituitrin is a good thing and sometimes works wonders, but it should not be used until the os is fully dilated, and then only when uterine contractions are feeble, or a condition of atony prevails.

As to gynecology, we are all gynecologists, and yet more depends upon gynecological diagnosis than perhaps any other condition we are called upon to treat.

In passing, I will suggest that I do not think it a good recommendation to see a physician's office filled with women patients, waiting for local treatment; if all such cases are followed up many of them will prove to be inoperable cancer cases, or pus tubes, with all the pelvic viscera a mass of adhesions.

I think the time is fast coming when we will operate on the lacerated cervix as soon as it is found, as well as on all cases of the so-called relaxed vaginal outlet.

I mention the pessary only to condemn it. In fact it is an instrument fast becoming obsolete. We remember that every physician fifteen or twenty years ago had at all times a grip full of them; it is rare now to find them at all in the physician's armamentarium.

I mention these things in a desultory way, and as we have a full and interesting program. I will not consume your time further.

*Chairman's address, section on Gynecology and Obstetrics, State Medical Association of Texas. Delivered before the section, Fort Worth, May 6, 1915.

OCULAR SYPHILIS.—E. G. Seibert, Washington, D. C., (*Journal A. M. A.*, May 15, 1915), judging by the close analogy of the ocular circulation to that of the brain, concluded that the spirochetes were able to protect themselves from the blood stream and thus escape antisyphilitic remedies given by that route. He thought that if serosalvarsan could be directly brought into contact in the eye with the germs, there would be a better chance for cure; and therefore was induced to apply it subconjunctivally in ocular syphilis. In the three cases here mentioned, the method was markedly effective, or more rapid in its effect than the older methods. In one of the cases, that of a refractory child, the good results seemed to follow simply the dropping of the serum into the eye, in a case of interstitial keratitis. He believes the method is perfectly safe and justifiable.

INJURIES TO THE INFANT, PRODUCED AT BIRTH.*

BY

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It is appalling to think of the number of deaths that occur annually from birth accidents. The day of birth records the highest death rate of all days. Schultze has estimated that 5 per cent of all children are still born or die during labor and that 1 per cent die soon after birth, as the result of the trauma of labor. De Lee says, "We can safely say, that in the United States, 75,000 children die annually during delivery; and that a large number of these die from asphyxia and injuries during birth while the others die from syphilis, alcoholism of the parents and congenital defects." Porter says that 17 per cent of the inmates of the Feeble Minded Institute of Indiana give a history of difficult births and that 4 per cent give a history of forceps operations. Just a little history on the subject and just a little meditation along this line, will bring us to realize that opportunity after opportunity present themselves in this great field of preventive medicine.

I shall not attempt to explain the cause and result of caputsuccedaneum and cepalohaematoma, for with each of these we are familiar. They are found most frequently in cases of contracted pelves and persistent posterior rotations.

It is an admitted fact that the future welfare of the child depends upon the skill of the accoucher; the existing proportion between the child and the pelvis, and upon the nature and severity of the operation. Let us face this problem squarely and admit that too many women go to the end of gestation, enter labor, pass the ideal time for Caesarean section and then find a contracted pelvis. I wonder if it ever requires the use of the forceps to make this discovery? It is in these contracted pelves that the child suffers most. It is here that by the use of the forceps we sometimes get a depressed fracture, a concussion of the brain or an intracranial hemorrhage, either of which may cause a permanent pathological change which, in later life, may explain paralysis, headache, epilepsy and other existing maladies. Fractures of the extremities occur more often than is thought for. Usually these injuries are the result of unscientific application of the mechanics of delivery; brute force is substituted for proper and thoughtful manipulations. I sometimes wonder if it is not impossible to differentiate, especially in the case of the femur, between acquired and congenital dislocations.

Central cerebral or spinal cord lesions are sometimes the result of severe labor or operative deliveries. It is in these cases that the greatest skill should be exemplified. Not only a scientific knowledge of the application of forceps but a knowledge of reality of the axes of the pelvis, that proper traction in the proper direction can be both applied and exercised. Just recently a case came under my care, afflicted with paralysis of the right arm and leg. The following history was given:

Case 1.—Multipara, IV. January 19, 1913, at 6 a. m., was awakened by rupture of the membranes. Pain did not begin until the following day, January 20. Beginning at 1 p. m., one dram of fluid extract of ergot was taken about every ten minutes, until pains began which was at 2:30 p. m. The patient says she took, possibly, eight or ten doses, and at 3 p. m. the pains were almost unbearable, continuous and lasting two to three minutes, with but short intervals of rest. The stomach was bandaged tightly. A child of eight pounds was delivered at 4 p. m. Extreme asphyxia livida was present, the eyes were blood-shot, and the right hand blue and looked like it had been crushed. The child was unable to move this arm for several days, not much for weeks. Later it was noticed that the right leg was not so active as the other. It was explained to the mother that the position in utero, together with an abdominal scar, caused all of this deformity and weakness.

While we cannot accept this explanation, we can attribute much of the damage to possible traumatism of the brachial plexus, the brain or the spinal cord. At present the child shows signs of improvement, yet there will always be present more or less loss of function and atrophy of the leg and arm. Probably early trephining would have corrected or, at least added much to the repair of this injury.

Often asphyxia neonatorum is due to long and difficult labor, which is more or less productive of trauma. That condition during labor which will cut off the supply of oxygen or compresses the brain will produce asphyxia. During each contraction the maternal blood current is not only retarded through the placenta, but an increased pressure on the head is produced. Prolonged and hard labor pains, which prevent a change in the fetal blood, are frequently found in cases of general contracted pelvis and in cases with rigid and unyielding perineum. These conditions coupled together, sometimes with the injudicious use of pituitrin, may cause tetanic contractions which may in turn produce hypercarbonization. In truth, any condition that will lessen the placental area; that will compress the placenta, as in the case of the after coming head; that will cause the separation of the placenta in part or completely, or that will cause pressure on the umbilical cord, will cause hypercarbonization.

*Read before the Section on Gynecology and Obstetrics, State Medical Association of Texas, Fort Worth, May 6, 1915.

Internal or extreme pressure of the brain, whether due to forceps, hematoma or depressed fracture, may prevent the return flow of the blood from the fetus to the placenta, thus slowing the pulse, which, in turn, would produce hypercarbonization.

Hypercarbonization of the fetal blood prevents the cardiac and respiratory centers from receiving good blood which, in turn, acts as a stimulant to these centers. The respiratory center, being more torpid and less active than the cardiac, allows the latter to be stimulated to action and usually shows this by a slow fetal heart sound. By continued loss of oxygen the vagus center becomes more stimulated, eventually losing the inhibitory power, paralysis develops and the heart jumps up to 180 or 200. It is then the heart may become very irregular, stumbling along, strong and weak sounds intermingling, and eventually the torpid respiratory center is stimulated, and attempts to inspire is made, resulting in inhalation of liquor amnii, mucus and meconium, all or any of which may fill the lungs. It is self-evident that if sufficient oxygen is not furnished to counteract this, death will result. A slow fetal heart sound or an unusually fast one, is a signal of danger; it means that something is stimulating the vagus. A very rapid heart, accompanied by irregularity and followed by a perceptible slowing, below normal, suggests interference, and it is wise to distrust such cases and be on the alert to intercede before it is too late. A slow, strong sound means a vagus stimulation, while a rapid weak one means paralysis or loss of inhibitory action.

Lumpy and sea green color meconium found in the liquor amnii of cephalic presentation, is a bad omen; it is significant of intrauterine asphyxia. These intrauterine symptoms, with others, with which we are probably familiar, may indicate interference, at least by hastening delivery. Without a doubt, when the above named symptoms are present, but two courses can be pursued, namely, remove the cause or deliver the child. If delivery is selected, and usually that is the treatment, it must be considered whether the child can be delivered alive and without injury, whether it will live afterwards and what the danger to the life of the mother is. Just recently I had an experience, which has caused me to discuss this subject.

Case 2.—Primipara, age (?), pelvic measurements normal. Labor began about 8 p. m., February 6, 1915. L. O. A. contractions occurring about every twenty to thirty minutes and lasting probably, one-half minute. I saw the patient about 11 p. m., when she had a dilatation of probably one inch. I gave her ¼ grain of morphine and 1/150 grain of atropine. She slept possibly for two hours, when she awakened with pains, now occurring every 5 to 8 minutes, with a duration of ½ to 1 minute. At 3 p. m. the second stage began and dilation was complete. Pains increased in frequency and severity until about 6 a. m., when signs of inertia were present; the membranes were artificially ruptured, believing this procedure might stimulate the contractions. Fetal heart sounds were regular. The perineum was rigid and the pains did not increase. I then gave ½ c. c. pituitrin extract. Contractions increased some and twenty minutes later I gave another ½ c. c., with an increase in the severity of contractions. Soon after the first dose of pituitrin, I noticed a change in fetal heart sounds—slow and irregular, giving me great anxiety. A male child was delivered at 7:20 a. m., dead. All attempt to resuscitate the child availed nothing. The cause of death, uterine asphyxiation, was compression which probably caused hemorrhage of the brain or hypercarbonization stimulating the vagus center, later the respiratory centers, then inspiration and death.

Case 3.—Primipara, age 20. Pelvic measurements normal. L. O. A. Ovary and appendix removed about eighteen months previous. Date of confinement, approximately, February 4th. Onset of labor occurred February 24th, 1 a. m. Contractions continued at very irregular intervals during the day. I gave ¼ grain morphine at 10 a. m., and another at 8 p. m., with more or less rest during the day and night and until 2 a. m., February 25th, when contractions became regular, increasing in frequency and severity until 6 a. m., when they were occuring every 3 to 5 minutes, lasting ½ to 1 minute, with dilation equal to 2 to 3 inches. At 8:30, dilation was complete, the membranes were artificially ruptured and a sea green color meconium appeared in the liquor amnii. At this time the fetal heart sounds were slow and irregular. One c. c. of pituitrin was given and at 9:10 a female baby was born. Asphyxia pallida was present, requiring 30 minutes to resusciate. About 48 hours later it was thought the baby had light convulsions; it was slightly cynotic. I gave 2 grains of sodium bromide, per rectum. The head was elevated and ice applied. Feeding was by dropper.

Diagnosis: Compression of the head, due to a large non-moulding head, resulting, possibly, in a slow hemorrhage.*

Case 4.—April 7, 1915, at 3 p. m., I saw, in consultation, Mrs. A., who had been in labor since 10 p. m., April 6. The attending physician saw her at 4 a. m. and pains were regular until 11 a. m. She had taken about one ounce of ergot during the day, up to the time of my arrival. The position was R. O. P. at 3:30 p. m. Fetal heart sounds were slow and regular. At this hour 1 c. c. of pituitrin was given. Excessive pains began in about 2 minutes, scarcely relaxing for 6 to 8 minutes. Fetal heart sounds became irregular, faint and weak. At 4 p. m., pains again became inactive. I gave another ampoule of pituitrin, and the baby was born at 4:10. Asphyxia pallida was present, and it required 40 minutes to resuscitate. It apparently recovered, with heart sounds regular and respiration somewhat irregular. I instructed the nurse to observe the infant carefully and often. The next day, at 3 p. m., the baby gave a sharp cry and when noticed it was cyanotic and died almost immediately, possibly from an embolus or disturbance of respiratory center due to hemorrhage of the brain.

In conclusion, I beg to urge:

That neglect of frequent observance of the fetal heart sounds costs the life of many a child.

That a slow, irregular fetal heart beat or an excessively fast one, signifies fetal danger.

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*Author's Note:—On November 8, 1915, the child shows possible injury of the medulla.

That the presence of meconium in the liquor amnii in cephalic presentation, may mean compression, and failure to recognize this fact hazards the life of the fetus.

That pituitrin may cause tetanic contractions of the uterus, and if so, an interchange in the placental blood may be prevented, which would produce hypercarbonization.

That an irregular and slow fetal heart, or an excessively fast one, or the presence of meconium in the liquor amnii, are symptoms which indicate that the fetus must be delivered or it will probably die.

That if an attempt to deliver is made we should, first, know that the child can be delivered alive and that it will possibly live and second, that we will not injure the mother.

That an internal hematoma, causing internal pressure, should be removed early or permanent pathological destruction of the nervous system will take place, which may cause deformities, imbecility, epilepsy and other forms of degeneracy.

ABSTRACT OF DISCUSSION.

Dr. Wm. Lee Secor of Kerrville, said: As I do no obstetric practice, except in consultation, my knowledge of the subject is limited to the observation of the work of others. From these observations I can heartily agree, in the main, with the conclusions of the essayist. I believe that pituitrin is of the greatest value to the obstetrician, but its use must be properly guarded and the cases carefully selected. It is of the greatest importance to watch the fetal heart sounds, to make sure that the fetal circulation is not interferred with by the suddenly increased pressure. Pituitrin should not be used indiscriminately. In properly selected cases, at the right time, it is good, but used at the wrong time in improper cases its effect will be bad.

THE AFTER TREATMENT OF MOTHER AND BABE.*

BY

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As soon as the baby is born I wrap a sterile towel around both feet and hold it suspended, head down, until the cord ceases to pulsate, thereby giving the child 200 to 250 c. c. more blood than it would have if the cord were cut immediately. This additional quantity of blood to the child will materially enhance its chances of surviving and resisting infectious diseases. The suspension will aid also in getting rid of any amniotic fluid in the throat or bronchial tubes. While the child is suspended I wipe the eyes and eye lids with a soft sterile cloth, and with another sterile cloth remove as much mucus as possible from the mouth. The baby is then laid on the mother's abdomen, and after placing a sterile cloth around the cord below where it is to be tied, the cord is milked toward the center, especially if it be a large cord, and is tied close to the child's abdomen and severed with sterile scissors, after placing a ligature on the placental side. The cord is then enveloped in the cloth, and the baby given to the nurse, who receives it in a warm and if possible sterile cloth.

My attention is next given to the mother, and after the placenta has been delivered I myself sponge the vulva and surrounding tissue, with an antiseptic solution, preferably a 1/2000 bichloride of mercury, and after inspecting for and repairing any tears, I apply a sterile vulva pad and superintend the changing of the patient's garments and her bed linen, permitting her to turn from side to side if necessary, all the while keeping my hand on the uterus.

Having finished with the mother, I again turn my attention to the child, and after thoroughly cleaning the eyes and eyelids with boric acid or argyrol solution, I look the baby over for any possible defects and if a male child, with special reference to a circumcision, which, if needed, and with the consent of the parents, I do after the following method: Splitting the skin and mucus membrane on the dorsum of the penis, turning back and trimming to suit the case, being careful not to cut off too much tissue. Sterile vaseline on a sterile cloth is applied, and changed as often as the baby soils the napkin. No stitches are required and union is usually complete in 5 or 6 days.

Before leaving the house I again examine the mother to see if the uterus is well contracted and the pulse normal, or about normal, and should the patient have a pulse of 90 or more after a normal labor, I am apprehensive of an impending eclampsia or hemorrhage.

The nurse is instructed to give the baby an abundance of boiled, cool water and to place the child in a cool place, perferably its own bed, with a hot water bottle at its feet.

I visit my patient again in about twelve hours, to see that she has voided her urine, and if she has not, I resort to the following measures before using the catheter: Place a bed-pan containing hot water, under her and pour over the vulva a warm sterile solution, turning on the faucet in a nearby sink. Apply sterile hot towels over the bladder region, giving hot rectal enemas. Administer one c. c. of pituitrin. If all of these measures fail and the patient is not too weak, she is lifted out of bed and placed on a slop jar containing hot water. After the bladder is emptied I measure the uterus, having the nurse record the measurements. On each succeeding visit this measurement is taken, and if the uterus shows progressive involution I do not fear septicemia.

The nurse is instructed how to apply an abdominal binder, placing the first safety pin at the fundus, then taking one or two darts over the thighs, having the binder long enough

*Read before the Section on Gynecology and Obstetrics, State Medical Association of Texas, Fort Worth, May 6, 1915.

to reach the crest of the ilium. This binder has a two-fold effect; it prevents the uterus from relaxing, thereby accumulating blood clots, favors involution and keep the patient's legs together, which is particularly important if the perineum has been repaired. At each visit I undo the binder, separate slightly the patient's thighs and massage the uterus to expel any clots. A few hours after the birth of the baby, the head of the bed is elevated six or eight inches, to favor drainage. At this juncture I would caution that confinement be had on a good firm mattress, I have had a few cases of infection, which I believe were caused by the patients lying on soft beds, the hips sinking into a hole in the mattress and the accumulated fluid in the vagina keeping the cervix bathed in a fluid full of bacteria.

The diet of the patient is fluid or semi-fluid, until the bowels have moved thoroughly, and I have them act not later than the third day. After each bowel or kidney movement, the vulva is sponged gently with a bichloride solution and a sterile vulva pad applied. This is kept up until all lochial discharge stops. I do not permit my patient to have acid or acid fruits for several days and then only in moderation, until the baby becomes accustomed to them; otherwise the baby will suffer more or less from intestinal colic.

If the breasts are pendulous a breast binder is applied at once; otherwise not until the milk is established. The nipples are bathed in a saturated boric acid solution before and after each nursing and a small square of gauze is applied over them and held in place by a thin strip of adhesive plaster. It will not be necessary to remove the gauze each time the baby nurses; it is only necessary to turn up one angle. If the mother is able to do so, I insist that once each day she be assisted over a slop basin, to favor expulsion of any clots that may have accumulated in the vagina. I see that my patient has an abundance of water both inside and out, plenty of fresh air, room darkened and no visitors until after the 5th day. On the 8th, 9th or 10th day, the patient is permitted to leave the bed, with instructions to do no work and to avoid lifting anything, not even the baby, until three weeks have gone by.

At each of my visits I look after the baby, inspect the cord, eyes, mouth, etc., see that it is getting the full amount of boiled cool water and fresh air, and that it is not being disturbed or handled, except to change napkins, and put it to the breast not oftener than every three hours.

I have found that by following these little details after delivery under aseptic conditions, including sterile field, gloves, gown, etc., I have a much more satisfied clientele, and can get better remuneration for my services.

LACERATED CERVIX.*

BY

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The subject of lacerated cervix has been discussed at practically every meeting of the Association since its beginning, but it will stand rehearsing.

The cervix is cylindrical in section, wider in the middle than above or below and may be divided into three portions an upper or supravaginal zone; a middle zone of vaginal attachment, and a lower, intravaginal zone, the os uteri. The supravaginal zone, representing about one-half of the neck behind and two-thirds in front, is in relation anteriorily with the bladder, posteriorly it is covered with the peritoneum of the anterior wall of the pouch of douglas and at the sides it is connected with the broad ligament, in which lie the uterine vessels and ureter, the latter at a distance of a little over half an inch. The zone of vaginal attachment is obliquely set, extending higher behind than in front, and has a depth of about one-fifth of an inch. The intravaginal zone or os uteri, is covered with mucous membrane, continuous with that of the vagina. It presents the external aperture of the uterine cavity, usually in the form of a transverse fissure, about a quarter of an inch in length, bounded by two prominent labia, anterior and posterior, both of which are in contact with the posterior wall of the vagina. The anterior lip is the thicker, shorter and lower; the posterior lip is longer, on account of the greater height of the posterior vaginal fornix.

Lacerations of the cervix are very common. The cervical rim is more or less torn in the majority of women during their first confinement, but a large proportion of these tears are insignificant and heal spontaneously, without causing any trouble. The chief cause of cervical tears is meddlesome obstetrics, for example, want of care or judgment in the use of forceps, premature rupture of the bag of waters, the injudicious use of ergot, pituitrin, etc., mechanical dilatation of the cervix and roughness in performing podalic version. These causes are avoidable, as a rule, and should be borne in mind, in order to reduce to a minimum the frequency of laceration. Premature labor or abortion, may also result in a torn cervix, because of the fact that the tissues are not prepared to undergo dilatation. Precipitate labor, and a disproportion existing between the size of the child and the birth canal, are also causes. Laceration of the cervix may occur at any part

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of its circumference. It may be bilateral, unilateral or stellate.

The symptoms are not pathognomonic and are due to the lesions caused by the laceration. The most constant of these secondary conditions are, sub-involution of the uterus, endometritis and uterine displacements, and the symptoms usually described as being due to lacerations of the cervix, are in reality caused by one or all of these complications. Backache, bearing down in the pelvis, vertical headache, leukorrhea, menorrhagia, metrorrhagia, sterility and abortion, are the most frequent of these symptoms. The patient loses weight, her appetite becomes fickle and she is insufficiently nourished, digestion is impaired, chronic constipation eventually causes auto-intoxication, there are neuralgic pains in various parts of the body, and finally neurasthenia develops, with its various sensory and motor phenomena. In addition to these there are certain local and general manifestations which are directly due to pathologic changes in the cervix itself. The cicatricial tissue resulting from an attempt upon the part of nature to repair the laceration, often produces reflex irritations which are not only annoying but exhausting to the patient. It is a matter of every day experience how quickly these symptoms cease when the scar tissue is removed.

The results of the lacerations are either immediate or remote. Of the immediate results the most frequently observed are, hemorrhage, sepsis and vesico-vaginal fistula. The principal remote results are subinvolution of the uterus, chronic endometritis, uterine displacements, due to subinvolution or to contractions of cicatricial tissue in the cellular structures behind the uterus; chronic tubal and ovarian disease, and cancer.

In considering the treatment of lacerated cervix it must be borne in mind that fifty per cent of these tears should be let alone, as they are followed by no evil results. On the other hand, it must be remembered that cervical lacerations are often responsible for local and general conditions which not only destroy the health of the patient but are even dangerous to life. The likelihood of cancer developing at the site of a laceration must not be forgotten, and I believe we will always be on the safe side in operating upon selected cases, solely with the object in view of preventing malignancy. The treatment is always operative.

Lacerations of the cervix should not be repaired at the time of their occurrence, as it is usually impossible, on account of the condition of the cervical tissues after labor, to recognize the extent or character of the traumatism and approximate the torn structures. And, furthermore, the danger of infection is so apparent that this plan of treatment is unsurgical and should be earnestly condemned. If the circular artery should be torn, however, it should be caught up by a deep suture of iodin catgut, and the laceration repaired at the same time.

The so-called intermediate operation for lacerations of the cervix, consists in repairing the injury after the fifth day of the puerperium, by removing the granulations and suturing the edges of the cervical tear. Notwithstanding that this procedure is advocated by some of the most prominent teachers of obstetrics, it is not based upon sound surgical principles, and should be condemned. There is too much danger of causing infection at a time when an aseptic parturient tract is of the utmost importance. It is, therefore, the best rule to wait at least long enough for the parts to resume their normal size and shape, and the patient has entirely recuperated from the effects of the confinement, before operating.

As a large number of lacerations require no treatment whatever, it is important to have a clear and definite idea as to what class of cases require operative interference.

The following rules have been formulated for this purpose:

(1) Operate upon all lacerations which are complicated with induration and hypertrophy of the cervical tissues, eversion of the intracervical mucous membrane, cystic degeneration and erosion.

(2) Operate upon all lacerations which are responsible for subinvolution of the uterus, endometritis and uterine displacements.

(3) Operate upon all lacerations which are associated with a sensitive plug of scar tissue in the angle of the wound.

Any grave pelvic disease is a contra indication for operative interference in laceration of the cervix. This does not include all forms of pelvic lesions, such as simple congestion or inflammation of the uterine appendages, but only those conditions in which pus exists or firm adhesions are present. There is always considerable dragging upon the uterus during an operation upon the cervix, and these manipulations may cause a fatal peritonitis by breaking up old adhesions.

Nitrous Oxid Gas in Obstetrics.—F. W. Lynch, Chicago, (*Journal A. M. A.*, March 6, 1915), reports that since July, 1913, he has used nitrous oxid gas in long continued analgesia in obstetric work, and has kept it up for more than an hour in thirty-four cases. The method used must not be confounded with the older use of gas for complete anesthesia about the time of actual birth. He uses a nosepiece such as that employed by dentists, and the patient is told to breathe deeply but rapidly through the nose. Five or six respirations produce analgesia, and then the nosepiece is put over the mouth, the patient told to breathe through the mouth, and the analgesia is maintained by mixing oxygen with the gas until the end of the pain.

CORRECTION OF CHRONIC UTERINE DISPLACEMENTS.*

BY

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In devising operative methods for the relief of retroversions, we often have other conditions to deal with. A tendency to relaxation of the pelvic muscles and fascae, a deficiency in tone and elasticity, producing what is known as a relaxed vaginal outlet, usually accompany uterine displacements, especially in multipara, and while all cases do not require treatment, when a case is found which requires attention, nothing less than surgical intervention will give permanent relief. Such a case left alone until the patient is well advanced in years, when atrophy of the muscular system results in prolapse in a good percentage of the cases, produces at least partial invalidism.

I prefer in such cases to attempt to give a substantial body, first by raising a flap by lateral and posterior dissection, so as to free well the levator ani muscles, which are approximated and made secure in position with kangaroo tendon sutures, narrowing the vaginal outlet to virgin size, before completing the operation by uniting the transverse muscles, fascae and skin. In three cases, after making this preliminary operation the round ligament operation was refused, on the ground that relief was sufficient without the latter operation. Before Alexander and his followers, gave us the operations for relief of retroversions, Emmett claimed excellent results in such cases from plastic vaginal operations. Making or restoring the perineal body will not restore the retroverted uterus, but it will relieve a condition that is so often found with it, often resulting in relief of the most decided and annoying symptoms.

Despite this fact, we have cases of retroversion producing symptoms so decided and intense that we must remove the uterus permanently from its false position, in order to eliminate reflex pains and various neurotic conditions. As evidence, I call attention to a case of a maid, a student and teacher, who suffered so constantly and intensely with neuralgia of the temporal region and eyes, that after a few months of attention given by various competent physicians, including an oculist and the fitting of glasses, was compelled to give up her work as student and teacher. Dr. Savage, of Nashville, advised her to consult a gynecologist. I found no evidence of former pelvic inflammation; a maiden uterus with the usual condition; uterus movable, but retroverted, lying upon the plexus of nerves of the sacrum. I resorted at once to a modified Alexander operation, keeping the uterus well forward. The operation was followed by complete and absolute relief and though several years have passed, the patient remains in perfect health.

The operation or readjustment that will restore the uterus to its normal position and retain it there, and retain the ovaries with their ligaments high up in the pelvic cavity, will give the most satisfactory results. I am convinced that several of our well known methods, the inventions of surgeons of unquestionable skill as operators and reputation as authors, will soon become obsolete. I refer especially to the fixation and various peritoneal suspension methods. While the utilization of the round ligaments is decidedly preferable to peritoneal suspension, the objection to the Gilliam operation of drawing the round ligaments through a stab wound in the rectus muscles is, that firm bands of tissue are stretched across the free abdominal cavity, and in case the ligaments are overshortened and the fundus held in contact with the abdominal incision, resulting in adhesions, we have a suspensory ligament with four openings, through any one of which an intestine may pass and become strangulated.

One of the most successful operations ever suggested is that of Sympson, modified somewhat by Barrett and others. In this operation a median incision is made, the round ligament is caught with ligature or forceps about 1½ or 2 inches from the uterus. The fascia is punctured about 1½ inches laterally by the incision. Properly curved forceps are introduced at the puncture, reaching the internal ring, which is demonstrated by making taut the round ligaments beneath the peritoneum, with which the ligature on the round ligament is grasped and drawn through, bringing with it the round ligament, which is stitched to the fascia with silk or linen, closing at the same time the puncture in the fascia. Thus we are using the substantial part of the round ligament, and at the same time utilizing it in its normal position.

I consider this operation inferior to only one other, and that is the operation of Baldy, which consists in puncturing the broad ligaments posterially with suitable forceps, holding the uterus well forward with the hand, grasping the round ligament, bringing it through the puncture in the broad ligament, encircling the uterus posteriorly to meet the round ligament of the opposite side, where they are united and then joined to the uterus at at least two points. The importance of elevating the ovaries out of the way in these operations has not in the past been appreciated as it should. As Dr. Baldy says, when the uterus is thrown forward by almost any other operation the ovary will usually rise with it, and the displacement of all

*Read before the Section on Gynecology and Obstetrics, State Medical Association of Texas, Fort Worth, May 6, 1915.

the organs will be corrected at one and the same time; but every operator will recognize the fact that there is a certain large group in which the ovarian ligaments are relatively more stretched than the uterine and in spite of the fundus being brought forward, the ovaries are still prolapsed. In the Baldy operation, the elevation of the ovaries is not accomplished by the general elevation of the uterus alone. The round ligaments passing back through the broad ligament beneath the ovarian ligament and rolling forward the top of the broad ligament by its backward pull, results in the elevation of the ovary and fallopian tube. In this operation, the uterus does not depend upon the integrity of the round ligament, as in the suspension operation. The moment the uterus attempts to leave its forward position, it meets the resistance of the encircling ligaments, as well as the forward and downward pull at the anterior and corneal attachments, and thus rides in a cradle, as it were, movable backward and forward, without being able to get beyond its center of gravity or posterior to the axis of the pelvis. I cannot recount hundreds of cases to prove results, but of a number I have done, my observation is that no other method has been followed by such satisfaction to both patient and surgeon.

USE AND ABUSE OF THE TONSILS.*

BY

W. E. CONNOR, M. D.,

CUMBY, TEXAS.

My object in writing this paper is not to minimize the good that has been done and the service still being rendered daily to suffering humanity, by the removal of these offenders. To the contrary, I want to place myself on record as heartily endorsing their complete removal, when there is good and sufficient reason therefore, and as fully appreciative of the good of this procedure. I am fully pursuaded, also, that many tonsils are being removed today by well meaning physicians and specialists, in the hope of relieving some disease, the exact etiology of which they have not determined. In this belief, I want to add my protest over the indiscriminate removal of the tonsil without a fair and painstaking examination, to establish proof of the guilt of the tonsil.

Even in the hands of an expert, I consider this a very serious operation, producing shock, and oftimes a hemorrhage difficult to control, even death having resulted therefrom.

In many cases the results from the operation are disappointing. The voices of singers have been practically destroyed in some cases, while the functions of the tonsils, be they ever so small, have been denied these patients forever. It has been my contention that all members of the human organism are put in their places for good, and not evil purposes, and that, our first duty is to save and not destroy any of them, so long as there is a chance of saving them without endangering the usefulness of some other member, of as great or greater importance to the individual.

The physiology of the tonsils is not as yet fully understood, but recent research has fully demonstrated their usefulness to an extent which warrants a defense against their unnecessary removal. Darland defines the tonsil as a small, almond shaped mass, between the pillows of the fauces on either side. The tonsils are composed mainly of lymphoid tissue. They are covered with mucous membrane and contain various crypts and many lymphofollicles. They are believed to act as sources for the supply of phagocytes to the mouth and pharynx, which destroy bacteria entering the mouth. It was long ago recognized that the tonsils secrete a viscid mucous that facilitate deglutition, while recent investigations show that this mucous at the same time contains phagocytes, which destroy the various micro-organisms found in the buccal cavity.

The tonsils, in the main, being composed of lymphoid tissue and having many lymphfollicles, the primary function of which is to act as a sort of filter for lymph, tends to arrest the invasion of toxic material by the cellular hyperplasia resulting from the irritation. Any disintegrating or dead cells, particles of dust, bacteria, etc., which may find their way into the lymph vessels, are harmlessly carried along until they reach a lymph node, where they are, in part at least, deposited among the trabeculae of the sinuses, or are taken up by the phagocytic cells, while the filtered lymph passes on and out of the efferent vessels. These most important functions have been attributed to the tonsils by Pruden, Delafield and other writers.

It has been demonstrated by Stoher, that the tonsils are traversed by enormous numbers of leukocytes, which exercise a kind of migration towards the oral cavity; actually demonstrating the passage of leukocytes through the tonsilor epithelium into the buccal cavity, which is well known to contain various micro-organisms.

Metchnikoff found that mucous removed from the tonsil of a person in good health always contained numerous leukocytes, especially small phagocytes filled with micro-organisms of all kinds.

Adami and Nicolis, as a result of careful investigation, concluded that while the tonsils are themselves to a limited degree phagocytic,

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through their lymphoid cells, polymorphonuclear leukocytes in considerable numbers make their way from the blood vessels to their surface, through their epithelial covering. Since these leukocytes are strongly phagocytic, their marked activity suggests that the tonsils form one of the most powerful barriers of the body against invasion by infectious micro-organisms. Placed, as they are, like sentinels, they guard the most vital orifices of the human organisms.

Hugh T. Ashley, in an anlysis of 3,000 cases of enlarged tonsils, and adenoids, concluded that they enlarge in order physiologically to augment the lymphoid tissues of the body. From this evidence of the physiological function of the tonsils, I think we are safe in saying that the tonsils are generators of lymphocytes and leukocytes, which are undoubtedly present in large numbers, where they may be stored up for ready action, in addition to their specific bactericidal action. A constant stream of lymph from the depth to the surface exists, which alone would protect by counteracting an invasion of micro-organisms, and clearing the surface of these unwelcome settlers.

It is generally accepted by most authorities that the mildest types of diphtheria are those where the membrane is confined to the tonsils, showing most conclusively the defensive action of these organs. Complete removal of the tonsils for all complaints wherein they demand surgical attention, is most radical, in my judgment, since clipping away the ragged and diseased portion has relieved most cases that have come to me for treatment. I believe it is good practice to leave as much of the healthy tonsil as possible, to carry on the function of these organs, since they have never been proven useless. Local and hygienic treatment saves numbers of these cases the ordeal of an operation, and restores them to perfect health.

Dr. John Zohorsky of St. Louis, says that removing tonsils for repeated attacks of tonsilitis, is often followed by recurrent attacks of bronchitis. He says that adenoids protect the middle ear instead of causing middle ear trouble, and unless they are so large that they interfere with respiration, he would not advise their removal. We get middle ear disease when the adenoids or tonsils are defective, or when they are so large that they obstruct. When the adenoids obstruct the post nasal space and interferes with respiration, they should be removed; but some tissue should be left as a protection.

Where the tonsils are the seat of chronic focal infection, they should unquestionably be removed as soon as possible; but I have not so found them, not as frequently as some recent writers on this subject. It would be of interest to know what are the most common sources of infection of the tonsils themselves. I have seen tonsilitis caused by the extraction of a wisdom tooth, and following alveola abscess.

I believe pyorrhea is one of the most common causes of focal infection and it is often overlooked; there is very little mention of it by recent writers. The general causes are too well understood to need mention. Before attacking the tonsils, it would be a good plan, in all cases, to carefully examine the nose and accessory sinuses and more especially look after the condition of the jaws, for latent foci of pus in the jaw are much more common than in the tonsils. The tonsils are usually swollen during the time the 6th and 12th year molars are erupting, and I have seen tonsilitis follow the eruption of the wisdom teeth, when the gums were bruised and swollen.

No one will deny the theory of focal infection, and few of us will question that the tonsil is one of the sources of systemic infection; but is there not a possible danger in the too frequent reiteration of this fact, without a word of caution? The tonsil operation, in my humble opinion, is already too popular, since we are told by many enthusiastic operators that removal of the tonsil does no harm.

Dr. Hudson Makuen says, "The removal of the tonsil may, and sometimes does do harm." He made the statement in a recent paper that an extracapsular tonsilestomized pharynx is always a damaged pharynx. Dr. Joseph C. Beck, in closing one of his latest contributions on focal infection of the tonsils, said, "From my experience I am sure that I have done very little if any harm by the removal of tonsils and adenoids for this purpose and I am sure that I have done considerable good."

ABSTRACT OF DISCUSSION.

Dr. M. P. Schuster, El Paso, said: I think we should operate according to the pathology. If tonsils are diseased they should be removed, by all means. If there is only mechanical obstruction, then a tonsillotomy is sufficient; but if the tonsils are diseased, tonsillectomy would certainly he indicated.

Dr. C. Joyes of Fort Worth, said: I feel quite alone in my views on the subject of the removal of tonsils. I think tonsillotomy is best. I think the voice is frequently injured by the removal of tonsils and the adhesions of the pillars. I recall a case of a singer of Fort Worth, whose voice was very materially injured by a tonsillectomy, in spite of the fact that the operation was performed perfectly. The patient was not relieved of the symptoms for which the operation was performed, but the following winter she had an aggravation of the same symptoms which were present more constantly than before, she went to the other man instead of me, because I advised tonsillotomy and "her doctor" wanted the tonsils "out."

Dr. R. H. Gough, Fort Worth, said: I do not wish to criticise the doctor's paper too severely, but I am reminded of a story my father used to tell. The first part of the story I cannot remember, but it closed this way: "You'll be damned if you do and you'll be damned if you don't. I am aware of what has been said in recent literature on the functions of the tonsils, with reference to the effect

on the voice, assistance in deglutition, preventing infection, moistening the throat, etc., but I think most of that is farfetched and too theoretical to deserve our serious consideration. I believe all hypertrophied tonsils in adult life are pathological and are a menace to health. I believe that chronic arthritis and many other symptoms of illness, are but a sequelae of chronic tonsilitis and the absorption of poisonous debris from this old decaying gland. My recent experience in the enucleation of acutely inflamed tonsils, has taught me a great lesson with reference to the effects of tonsilitis upon the general system. Given a case of acute follicular tonsillitis, which ordinarily would last a week or ten days, with profound systemic shock. Enucleate these tonsils. The third day the patient will be perfectly comfortable, practically free from all systemic symptoms. With reference to the voice injury, my personal experience on my own voice has been that it is clearer, speech is performed with less difficulty and the singing notes have a larger range than before my tonsils were removed. I think we are perfectly safe and rational in advising the removal of every tonsil that is subject to recurrent attacks of inflammation.

THE REMOVAL OF A KNIFE BLADE FROM THE NOSE; SYMPTOMS AND RESULTS.*

BY

EDGAR H. VAUGHN, M. D.,

TYLER, TEXAS.

Quite a variety of objects have been discovered in the anterior nares. Among the most common are shoe buttons, peas, grains of corn, beads, pieces of cloth, beans, hooks and eyes, pins, bullets, shot, small pieces of knives, stilletos, gun wads and explosives. The most offensive object coming under the care of Dr. Wendell C. Phillips, of New York, was a section of a sponge that had been introduced three months previous. Dr. Ballenger, of Chicago, tells us of a most interesting case. An eye had been injured thirty years before, causing the loss of vision in that organ. Upon examination of the nose, he found and removed the breech pin of a musket, about the size of the first joint of the thumb, which had exploded at time of injury.

Small children seem to delight in forcing anything into the anterior nares that can be gotten into the space. It is also said that insane persons and idiots possess an inordinate fondness for introducing small bodies of any description into the anterior nares. Foreign bodies may also reach the nasal cavity by way of naso-pharynx, as a result of vomiting, eructation, or sudden sneezing or coughing while in the act of swallowing. The most common animate foreign bodies found in the nares are screw-worms. Drs. Hal Foster, M. A. Goldstein and J. S. Steel have written interesting papers along this line. During 1912, my former associate, Dr. C. L. Edgar, and myself had a case from which we extracted forty-seven of these worms.

The case I am reporting, on account of the size of the foreign body and the time it remained without detection, and some unusual symptoms, made it rather interesting to me. The patient was a young white boy, seventeen years of age, who was referred by Dr. B. F. Bell of Tyler, on account of a bloody mucopurulent discharge from the nose. The patient was accompanied by his father, who said the boy often while sitting quietly would suddenly fall over on the floor and remain unconscious for from ten minutes to one and one-half hours, first breathing hard and rapidly, then gradually easier and slower. He would turn more or less blue in the face and show signs of frothing at the mouth, but never biting his tongue. He would also have these attacks when he would get too warm while working on the farm. He suffered much from headaches, especially in the region between the eyes, and his eyeballs ached. His eyes watered at times and often the palpebral and ocular conjuntiva would be red, he also complained of frequent "eolds in the head." He pulled from his pocket four or five handkerchiefs, stiff and discolored from the bloody, mucopurulent discharge, and stated that he had used that many every day for over two years. His nose often blocked or stopped up, so that he could not breathe through it. He snored and breathed through the mouth at night. His ears would often ring and roar, causing fear of deafness. At times his hearing was very bad. His parents, sister and brothers were deeply interested and would not trust him out of their sight, for fear that he would fall and fail to recover consciousness.

These symptoms had been going on for over two years, at irregular intervals, with sometimes two or three seizures a day and then four or five days would elapse before another attack. He had been taken to several physicians and all had diagnosed his case epilepsy, and treated accordingly. No one could tell exactly what date the trouble began, until after the removal of the foreign body, when all was plain. An external examination showed redness with excoriation about the meatus and upper lip. A foul fetid odor was present. Internal examination showed the mucous membrane and turbinates fiery red and very badly swollen practically occluding the openings into the anterior nares. There was a bloody, mucopurulent discharge in abundance, especially from the right side. Both sides were badly blocked, but the right was worse, and the patient stated that if he pressed on the outside of the right side, it seemed just like a knife was cutting him. A spray of a weak solution of

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cocaine and adrenalin failed to shrink the parts to any degree. I then used a 4 per cent cocaine solution and a 1-1000 adrenalin solution on a cotton wound applicator. After several applications I succeeded in getting an applicator far enough in between the septum and the inferior turbinate, to feel a foreign body, which I took to be a large nail. The parts were still so swollen that I could scarcely see what I was doing. I took an alligator forcep and forced it down along the floor of the right side, grasped the object and made a slow pull which produced great pain. Seeing that the cocaine was not performing well, a general anesthetic was given. With some little difficulty I then delivered a mass of iron and rust about the size of the index finger of an adult. I could not tell what it was by its shape. It proved to be a whole knife blade, broken off at the handle. It measures now one and one-half inches long, and is something over half an inch at its widest part.

The patient was soon awake and his father remarked, "Your mother always said you had a knife blade in your head," a mother's instinct. The patient then told us that about three years before he had been injured in a personal altercation, sustaining a cut in the back and several cuts about the head. His nose bled considerably, but the wound in the back was more painful and attracted more attention. The back wound was attended to, and his nose having ceased to bleed, he concluded that the injury was merely a bruise. Evidently his antagonist had thrust the blade forcibly down the right side of his nose, where it broke off.

Of course, the patient has had a severe, chronic rhinitis since the removal of the knife blade, but he has never had a real attack of unconsciousness since. When last seen by me, about one year later, he stated that he had had no real fits, but sometimes got dizzy and thought he was going to have one.

DEPARTMENT OF EXTENSION

[Editor's Note: Many minutes have been wasted by busy physicians in telling patients how to disinfect a room; and we fear that many patients have been unable to thoroughly grasp the details of disinfection thus hurriedly imparted. The little article following, will help patients in anticipation of fumigation, and will enable them to do it well. It will save the physician both time and worry. Like other articles appearing in this Department, it is intended to be handed out by the physician in appropriate cases. We have a few reprints for those interested.]

CARE OF THE SICK ROOM AND ITS FUMIGATION.

It is prudent to disinfect or at least cleanse, every sick room at the termination of any illness. The method used must be decided upon by the physician, who can take into account the nature of the disease. If the room and its furnishings have been selected with foresight, the removal of all danger of contagion is a simple matter. It is, therefore, wise to anticipate the day of fumigation by contriving that the sick room shall contain nothing that is hard to disinfect, and that it be located appropriately.

While the law does not require quarantine in the case of all communicable diseases, the directions given below are intended for the quarantined sick room or the isolation room.

The room selected for the patient should be as remote as possible from the other used portions of the house. A room at the end of a hall, or off in an "L" is generally suitable. The patient is often able to wait on himself, especially during the latter part of the convalescence. As a rule, however, an attendant, preferably a trained nurse, is required. Since the patient and attendant must remain in the isolation room at all times, it is highly advisable to have a bath room adjacent to the sick room. The floor and walls of the sick room should be practically bare, and no curtains used except washable ones. Upholstered furniture and cushions should be avoided. The room should be capable of being closed tightly; hence, rooms opening off through open archways into other rooms are not appropriate.

It depresses a patient to listen to a discussion as to where or how he is to be isolated. In his hearing, conversation should be limited if possible to a discussion of how to make the patient comfortable rather than how to protect the health of others.

Even during isolation, it is necessary to arrange for the ingress and egress of certain essentials. Food can be carried on a tray, or plate. After meals, the tray can be placed by the nurse in a dish-pan outside, left near the door for the purpose. The dish-pan can then be filled with water and set on the stove; after the water boils, the utensils can be handled safely. The well members of the family should not use the bath room adjacent to the sick room. In small households where there is only one bath room, it can be made to serve by proper precautions. The seat of the commode should be washed with an antiseptic solution, after being used. The tub should be reserved either for the sick or for the well. All who enter the bath room should regard it as neutral territory, and should carefully avoid touching anything with the fingers.

The sick room should be cleansed by some dustless method. Mopping the floor with a mop wrung out of antiseptic solution, is one satisfactory way of cleansing the floor. The furniture, door knobs, window-sills and the accessible portions of the woodwork, can be rubbed with an oiled rag, or with a rag moistened with some antiseptic solution.

The bed linen should be removed with the minimum amount of waving through the air, and, with the personal linen, should be placed in a clean pillowslip. The laundryman or washwoman, should be instructed to soak the pillowslip in boiling water for five minutes before removing its contents.

The antiseptic solution used for wiping off chairs, doorknobs, etc., should be one of the following: Corrosive sublimate, seven grains to the quart of water; pure carbolic acid, two teaspoonfuls to the pint of water; Kreso, one teaspoonful to the pint of water; formaldehyde solution, three teaspoonful to the pint of water. Either of these solutions is effective in the strength named. The bichloride is odorless but poisonous. The formaldehyde solution irritates the eyes and should not be used in the sick room. The Kreso solution has some odor.

RELEASING THE QUARANTINE.

When the day for releasing the quarantine arrives, the fumigation can be conducted with very little difficulty if the foregoing instructions have been carried out. The patient's clean clothing should be placed outside the sick room. The patient should

then take a careful sponge bath with corrosive sublimate solution, seven grains to the quart of water. The hair should be thoroughly soaked in this solution, carefully protecting the eyes. The entire body should then be rinsed off in pure water and the patient, leaving the sick room without touching anything, should put on the clean clothing, and go where he will. The nurse or the attendant, should then disinfect or purify the room, by one of the several methods given below. The selection of the chemical to be used should, of course, be left to the physician, but regardless of which chemical is used, the room should be prepared for fumigation, as follows:

The floor should be mopped thoroughly with corrosive sublimate solution, seven grains to the quart of water. The mattress should be sprinkled, or wiped with a rag wrung out of this solution. The blankets should be hung on lines, or so arranged on the bed as to hang free of folds and wrinkles. Closet doors should be opened, and dresser drawers pulled out and all articles of clothing hung up on lines. Furniture and woodwork should be gone over with a cloth wrung out of the solution mentioned above. The floor should be sprinkled with water. Books are not easily disinfected, and should not be used after having been in the isolation room. Valuable books however, need not be destroyed, but should be disinfected in a small, air tight box with a concentrated vapor. The books should be stood on end and the leaves separated one from the other.

Before starting the fumigation, the room should be made as nearly as possible air tight. Wetted strips of newspaper, six inches wide, will adhere over the cracks around the windows and doors. Chimneys can be stopped by stuffing with newspapers. Key holes can be stopped with cotton. The chemical chosen by the physician should be at hand ready to release the vapors for fumigation. Either one of the following may be used:

(1) *Solidified formaldehyde method.* This is economical and safe, but only reliable chemicals should be used, preferably those indorsed by the State Board of Health. To ascertain the cubic capacity of a room, multiply its length by its breadth (expressed in feet) then multiply this product by the height of the ceiling (also expressed in feet). The result will be the number of cubic feet in the room. Place a formaldehyde lamp, of the required size, in a tin or iron pan, on a brick near the center of the room. Light it, and leave the room at once, closing the door behind you. Seal the cracks around the door with strips of wetted newspaper. Leave the room closed for from six to eight hours, then open the doors and windows and air the room for 12 hours, before occupying it.

(2) *Permanganate formaldehyde method.* This is a reliable but expensive method. It takes 6½ oz. of permanganate of potash and one pint of 40 per cent solution of formaldehyde, for each one thousand feet of air space. After calculating this, as described above, place the required amount of formaldehyde in a large metal bucket, can, or small tub, capable of holding eight times the quantity of formaldehyde used. Support this bucket or tub on a couple of bricks near the middle of the room, and prepare for a hurried departure. Then pour the permanganate in the formaldehyde solution, go out, shut the door and seal with strips of wetted newspaper. One fluid ounce of sulphuric acid, added at the last moment, will make the action more complete. Leave the room sealed six or eight hours. Then open doors and windows and air the room for twelve hours, or until the irritating fumes disappear, before occupying it.

(3) *Sulphur method.* This is cheap, but the sulphur fumes bleach fabrics and tarnish metal objects, such as picture frames, brass beds, etc. It also will kill growing plants, either in the room or near windows. Calculate as above the cubic capacity of the room. Use five pounds of roll sulphur to the thousand feet of air space. Crush the sulphur and place it in one or more ordinary iron pots supported by bricks. Pour half a teacupful of wood alcohol over the sulphur and ignite with a match. Leave the room as soon as the sulphur is ignited and seal the door with strips of wetted paper. Leave the room closed six or eight hours. Then open the doors and windows and air the room for twelve hours, before occupying it.

The attendant should take a bichloride bath, as described for the patient. This can either be done just before mixing the chemicals and starting the fumigation, or it may be done outside the sick room and the clothing placed in a clean pillowcase, to remain unhandled until boiled.

SOME HEALTH QUESTIONS AND ANSWERS.

Q. Why will a pan of water under the consumptive's bed cure night sweats? A. It won't.

Q. What are the good and bad effects of sunlight in the parlor and living room? A. Sunlight will promote the general health of the members of the family. It may fade the carpet. It's up to you to decide which is the more important.

Q. Why will a bag of asafoetida about the neck keep off contagious disease? A. For the same reason that a cold buckwheat cake on the back of the neck will quarry gallstones.

Q. What effect does an amber necklace have upon a goitre? A. The same effect as a moss agate cuff button.

Q. What is the best time to expose a child to measles so that he may have it and be through with it? A. The day after you permit him to play with a razor and build bonfires on the parlor floor.

Q. What is the chief danger about vaccination? A. That it will not be done early enough, thoroughly enough or frequently enough.

Q. Why do some people still fear diphtheria antitoxin? A. For the same reason that some people still carry buckeyes in their trouser pockets to keep off rheumatism.

Q. What is the difference between Cuban itch and Puerto Rican chicken pox? A. There ain't no such animals.—*Illinois Health News.*

THE TRAGEDY OF UNPREPAREDNESS IN MEDICINE.

"A recent number of a periodical published in the interest of osteopaths," says *The Journal of the American Medical Association*, "contains a number of references to the death of a boy from diphtheria. A death from any cause and even one from diphtheria would not usually have caused so much comment, but this boy happened to be the son of the editor, who is an osteopath. The reports show that the disease was not recognized until a physician—a graduate of a Class C medical college—was called in, and he thought lobelia was better than antitoxin. The editor is now mourning the death of his son, regrets that antitoxin was not used, and has started a campaign among osteopaths urging the use of antitoxin in diphtheria. Pathetic as are the statements of this heart-broken father, they show unquestionably how slight was his knowledge of the simplest fundamentals of medicine. They show also that the admission to practice of any one who is tied down to a theory, a cult or a fad, who has not previously been trained in the underlying medical sciences, is a menace to the public." *The Journal of the American Medical Association* quotes a number of the statements contained in the osteopathic publication. It then continues: "The paragraphs quoted show the fallacy of the belief, which appears to be prev-

alent in some states, that an individual may be safely permitted to practice a single branch of medicine, or make use of a single method of treatment, without first undergoing a complete course of instruction in the fundamentals of medicine. If the editor of the paper quoted, before specializing in osteopathic methods, had obtained a complete medical training, it would have enabled him not only to recognize diphtheria in its earlier stages and possibly prevent the death of his son, but also to understand why antitoxin has reduced the death rate in diphtheria 'from 50 per cent to 10 per cent.' An important question—as far as the public is concerned—is: How many other children have lost their lives in his practice and in that of the thousands of others who have assumed the role of physicians, but who are unable to 'know a case of diphtheria if they saw it' or who cannot 'understand' or do not 'believe in' antitoxin? And diphtheria is only one of the many diseases, contagious or otherwise, which for their most favorable treatment require a positive and early diagnosis. While urging other osteopaths to make use of antitoxin in diphtheria, therefore, this editor at the same time might well urge that all practitioners of osteopathy and others cults enter some good medical school and complete their medical training so they may give their patients the benefit of the researches of Pasteur, Koch, Klebs, Flexner and others, which have done so much to reduce the death rate from contagious diseases and saved untold thousands of lives by the prevention of epidemics. If the death of this small boy will lead to such a reform, he will not have died in vain."

In a football game at St. Louis several weeks ago, one of the players received an injury to the cervical spine and was taken to the City Hospital. After careful examination it was determined that surgical interference was not indicated, in that fragments of the vertebra were not then pressing on the cord; that the character of the injury made the patient's condition practically hopeless, and that the treatment indicated was absolute quiet and immobilization. The parents of the boy were frankly told the seriousness of the injury. In the face of these conditions, according to the *Journal of the Missouri State Medical Association*, an osteopath who had been engaged by the father, wanted to treat the patient immediately. The surgeon in charge, fearing injudicious handling which would deprive the patient of any existing chance for recovery, refused to permit the osteopath's treatment. The osteopath, accompanied by the boy's father, then obtained an order from the mayor to the hospital commissioner, relieving the hospital physicians from further responsibility and permitting the osteopath to "try to save the patient as the doctors had 'given him up'." Says the Missouri Journal:

"For five days the patient had been resting quietly with a gradual lessening of the effects of the frightful shock from the hemorrhage into the cord. Then the osteopath applied a jury-mast to the victim's head, which resulted in renewed shock, a scream and a plea from the patient to remove the apparatus. The patient became cyanotic. The extension was removed on account of the patient's bad condition. Death followed about two hours later."

The necropsy report showed that death was due to "hemorrhage into the cord and fracture of the cervical verthrae," thus supporting the diagnosis of the physicians and proving that their treatment had been correct. The *Journal* continues:

"Now it seems clear that the mayor and the director of public welfare actually took charge of a poor unfortunate who was receiving the best possible care which could be provided in a metropolis and noted medical center. They dismissed the skilled attendants who were honest and had informed the relatives of the actual state of affairs and turned the patient over to the distracted and deluded father and mother and an arrogant, boastful osteopath."

Here, it seems, is another instance in which the delicate watch was given over for repairs, not to a skilled watchmaker, but to a blacksmith. The change of the patient from a condition of quiet restfulness, with its possible chance for recovery, to one of sudden pain, shock and speedy death was too prompt to be interpreted otherwise than as due to the use of methods entirely unwarranted by the condition of the patient.

MISCELLANEOUS

A LITTLE FUN AT THE EXPENSE OF THE DOCTOR.

The following was written by a lawyer friend, who had been called in to assist in an emergency case, by a prominent eye, ear, nose and throat practitioner of one of our Texas cities. It seems that this particular lawyer is much interested in medical matters, and is a rather constant reader of medical literature, loaned him by the physician in question. It is rather a clever and altogether friendly take-off, and is submitted for the passing amusement of the reader. The article is entitled "Report of a Remarkable Incident of Treatment of Suffokotomy," and runs as follows:

An infant of four months was hastily brought into his office by its distracted parents, who appeared to be people of porcurantic habits and much given to otiosity. They hurriedly explained that, in an unguarded moment, the child had seized its father's Waterbury watch and had swallowed it. A quick examination by *x*-ray and flash-light exhibited the fact that the child had inhaled the watch into the trachea, producing marked abrasion of the opening of the oesophagus, as well as lacerating the periosteum around the larynx, and causing considerable congestion of the thorax.

As the infant was getting black from asphyxiation, it was evident the case indicated the immediate need of oesophagotomy, tracheotomy and phlebotomy, with reverse English, and the same would have to be done quickly to prevent other physicians in the building from insisting on operating for appendicitis. A thermometrical test also showed rising temperature, super-induced by the presence of ticks in the watch. The child had also just coughed up the crystal, so it was clear what had to be done.

After introducing a curved tube at the base of the trachea, and producing an artificial expansion of the diaphragm, the epiglottis was depressed and a short section of aseptic garden hose passed through the mouth, through which, in turn, was inserted an anesthetized clothes pin, attached to the end of a sterilized cat gut. To the other end of the cat gut was attached a tack hammer, tied to the arm of the operating table by a stout cord.

By compressing the clothes pin with the forceps, and pushing it down the garden hose, it was made to close upon the ring of the Waterbury. Current was then turned into a large electro-magnet, placed in close proximity to the tack hammer. The cord was deftly cut, and an upward pressure at the same time applied on the curved tube through the base of the trachea. The magnet strongly attracted the tack hammer, jerking the cat gut, and the watch come out of the trachea, bringing the garden hose with it. The operation was a complete success.

The opening at the base of the trachea was then closed with putty and adhesive plaster, varnished over and made air-and-water-tight with denatured Valspar varnish.

Two cog wheels and a hair spring were missing, and the stem winder has not yet been recovered, but the watch was still running, and the child gave every evidence of having had a good time.

DR. BECTON DISSENTS.

Dear Doctor: In the January number of the Journal, page 509, under report from Hunt County Medical Society, a committee consisting of Dr. C. E. Cantrell, *et al*, presented a resolution relative to an article by Prof. Thompson of Galveston, in fact his annual address to the Texas Surgical Society. The said report conveys the idea that there was not a dissenting voice. I dissented from the report of the committee and gave as my reason that as the Texas Surgical Society was an independent organization and not in affiliation with the State Medical Association nor county societies, the Hunt County Society had no right to either criticize or condemn its actions.

Your friend,

Joe Becton.

Greenville, Texas, January 29, 1916.

LEPROSY DATA WANTED.

Dr. W. A. Davis, Secretary of the State Board of Health, Austin, very much desires information concerning the number and location of cases of leprosy in the State. An effort is being made to secure the establishment of a National Leprasorium, and it is essential to the success of the movement that a fairly accurate estimate as to the number of cases in the country be made at once.

MEDICAL BIBLIOGRAPHY AND HISTORY.

F. H. Garrison, Washington, D. C., (*Journal A. M. A.*, January 29, 1916), advocates the introduction into the medical curriculum of a course in medical bibliography and history. The advantages of knowing what has been done before and the suggestiveness and aid of such matters are emphasized. He refers to Harvey's discovery of the circulation and Beaumont's work on digestion as examples of inductive methods based on a careful and thorough review of all that had been done by their predecessors. In our modern medical literature, he says, it is becoming the fashion to preface a monograph with a historic introduction which may sometimes seem commonplace or perfunctory. It would be impossible for any modern physician to be sure that he is saying anything particularly new without this and there are some medical writers who have falsified their bibliographies by doing this second hand and quoting authorities that they have never seen, as was pointed out by Virchow many years ago in Germany. For the gigantic task of cataloging and arranging medical literature for this purpose we are indebted mainly to four men: Haller, whose catalogue of medical and surgical literature brought things down to the end of the eighteenth century, Callisen who continued the work up to the end of the first third of the nineteenth century, and Billings and Fletcher, who, in the Index Catalogue listed the whole medical literature of the world from the earliest times down to the present by authors and subjects and arranged the current medical literature of the world so that it would be accessible to the medical profession in the monthly *Index Medicus*. The other sciences have been well taken care of, their literature being more manageable, but that of medicine, as being in touch with nearly every phase of human activity or thought, is larger than that of any other branch or body of human knowledge and much of it is buried in the files of periodicals. It is not likely, Garrison says, that the undergraduate student will have occasion to use the larger medical bibliographies to any extent and then only under direction of his teachers, but he holds it is necessary or desirable that the student should use the bibliographic method and he suggests the keeping of a card index of his acquirements as he makes them. He gives examples of reference hunting in bibliographic work. The student is advised also to learn printers marks and obtain the proofreaders skill in finding errors. Medical papers are written and published by thousands and are most of them speedily forgotten and the student is advised before sending an article for publication if he chooses to do so, to read it over carefully himself and have some other competent person also pass judgment on it. The need for medical men who have specialized in medical bibliography and history and medical journalism is becoming more apparent every day. A medical history club of students is recommended and has a cultural value. To know the cultural history of his great profession is a worthy ambition for any medical man.

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1915, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies."

Euresol pro Capillis.—Euresol (see New and Nonofficial Remedies, 1915, p. 268) perfumed to render it suitable for scalp lotions. Merck & Co., New York. (*Jour. A. M. A.*, December 4, 1915.)

Pollen Extract (Pollen Vaccine).—A solution of pollen protein. It is used for the relief of prophylaxis of a common type of hay fever (pollinosis). Before using it the patient's susceptibility and tolerance should be determined. Treatment with pollen extract has seemed to give relief in some cases.

Hay Fever Vaccine, Mulford (Autumnal).—Pollen extract prepared from ragweed. Marketed in packages of four syringes containing, respectively, 0.0025 mg., 0.005 mg., 0.01 mg, and 0.02 mg. of pollen protein. Also in separate syringes containing 0.02 mg. pollen protein. The H. K. Mulford Co., Philadelphia, Pa. (*Jour A. M. A.*, December 4, 1915.)

Mercuric Succinimide, Merck.—A nonproprietary brand of mercuric succinimide admitted to New and Nonofficial Remedies. Merck & Co., New York. (*Jour A. M. A.*, December 4, 1915.)

Morphine Meconate, Merck.—A non-proprietary brand of morphine meconate admitted to New and Nonofficial Remedies. Merck & Co., New York. (*Jour. A. M. A.*, December 4, 1915.)

Swan's Staphylococcus Bacterin (No. 37).—Marketed in packages of six 1 Cc. vials and in 20 Cc. vials. Swan-Myers Company, Indianapolis, Ind.

Swan's Streptococcus Bacterin (No. 43).—Marketed in packages of six 1 Cc. vials and in 20 Cc. vials. Swan-Myers Company, Indianapolis, Ind.

Sodium Oleate, Merck.—A non-proprietary brand of sodium oleate admitted to New and Nonofficial Remedies. Merck & Company, New York.

Sodium Peroxide, Merck.—A non-proprietary brand of sodium peroxide admitted to New and Nonofficial Remedies. Merck & Company, New York.

Zinc Peroxide, Merck.—A non-proprietary brand of zinc peroxide admitted to New and Nonofficial Remedies. Merck & Company, New York.

Ethyl Salicylate, Merck.—A non-proprietary brand of ethyl salicylate admitted to New and Nonofficial Remedies. Merck & Company, New York.

Osmic Acid, Merck.—A non-proprietary brand of osmium tetroxide admitted to New and Nonofficial Remedies. Merck & Company, New York.

Calcium Peroxide, Merck.—A non-proprietary brand of calcium peroxide admitted to New and Nonofficial Remedies. Merck & Company, New York.

Thiosinamine, Merck.—A non-proprietary brand of thiosinamine admitted to New and Nonofficial Remedies. Merck & Company, New York.

Urea, Merck.—A non-proprietary brand of urea admitted to New and Nonofficial Remedies. Merck & Company, New York.

Ampuls Sodium Cacodylate, Mulford., 7¾ grains. —Each ampule contains sodium cacodylate 0.5 Gm. H. K. Mulford Company, Philadelphia, Pa.

Ampuls Sodium Cacodylate, Mulford, 15 grains. —Each ampule contains sodium cacodylate 1 Gm. H. K. Mulford Company, Philadelphia, Pa.

Ampules Solution Pituitary Extract, Mulford, 0.5 Cc.—Each ampule contains solution pituitary extract 0.5 Cc. H. K. Mulford Company, Philaphia, Pa. (*Jour. A. M. A.*, December 11, 1915.)

Scarlatina Strepto-Serobacterin, Mulford (Therapeutic), (Sensitized Scarlatinal Streptococcic Vaccine).—Marketed in packages of four syringes. H. K. Mulford Co., Philadelphia, Pa. (*Jour. A. M. A.*, December 18, 1915.)

Quinine Dihydrochloride (Quininae Dihydrochloridum).—The dihydrochlorid of the alkaloid quinine. Since quinine dihydrochloride is very soluble, its use has been proposed where concentrated solution of quinine are wanted, as for subcutaneous injections and similar purposes.

Ampules Quinine Dihydrochloride, Mulford, 0.24 Gm.—Each ampule contains 0.24 Gm. quinine dihydrochloride in 1 Cc. of sterile solution. H. K. Mulford Co., Philadelphia, Pa.

Ampules Quinine Dihydrochloride, Mulford, 0.5 Gm.—Each ampule contains 0.5 Gm. quinine dihydrochloride in 1 Cc. of sterile solution. H. K. Mulford Co., Philadelphia, Pa. (*Jour. A. M. A.*, December 18, 1915.)

Purified Tricresol, Mulford.—A mixture of isomeric cresols, corresponding closely to Cresol, U. S. P. H. K. Mulford Co., Philadelphia, Pa. (*Jour. A. M. A.*, December 18, 1915.)

Iodosticks (Iodine 60 per cent and Potassium Iodide 40 per cent).—Wooden stick 1½ inches long, tipped with a mixture of iodine 60 per cent and potassium iodide 40 per cent. Antiseptic Supply Co., New York. (*Jour. A. M. A.*, December 18, 1915.)

Iodoapplicators and Iodoapplicators, Special (Iodine 60 per cent and Potassium Iodide 40 per cent).—Wooden stick 6½ and 12 inches long, respectively, tipped with a mixture of iodine 60 per cent and potassium iodide 40 per cent. Antiseptic Supply Co., New York. (*Jour. A. M. A.*, December 18, 1915.)

G. Strophanthin (Thoms), Merck.—A non-proprietary brand of ouabain, crystallized. Merck & Company, New York.

Mercury Biniodide Oil Solution, in Ampules H. W. and Co.—One c. c. of solution contains red mercuric iodide in a neutral fatty oil, 0.1 Gm. (1/6 grain). Hynson, Westcott & Co., Baltimore, Md.

Mercurol Tablets, ¼ gr.— Each tablet contains mercurol 0.016 Gm. Parke, Davis & Co., Detroit, Mich.

Mercurol Tablets, ½ gr.—Each tablet contains mercurol 0.03 Gm. Parke, Davis & Co., Detroit, Mich.

Mercurol Tablets, 1 gr.—Each tablet contains mercurol 0.065 Gm. Parke, Davis & Co., Detroit, Mich.

Mercurol Tablets, 2 grs.—Each tablet contains mercurol 0.13 Gm. Parke, Davis & Co., Detroit, Mich.

Mercurol With Potassium Iodide Tablets.—Each tablet contains mercurol ¼ grain and potassium iodide 1 grain. Parke, Davis & Co., Detroit, Mich.

Iodalbin and Mercurol Tablets.—Each tablet contains iodalbin 5 grains and mercurol 1 grain. Parke, Davis & Co., Detroit, Mich.

Liquid Petrolatum, Merck.—A non-proprietary brand of liquid petrolatum, U. S. P. It is made from American petroleum. It is colorless, non-fluorescent, practically odorless and tasteless. Merck & Co., New York. (*Jour. A. M. A.*, December 25, 1915.)

PROPAGANDA FOR REFORM.

Proprietary Digitalis Preparations.—The Council on Pharmacy and Chemistry reports that it is becoming increasingly apparent that the tincture of digitalis produces the full therapeutic effects of digitalis, and that when it is properly made it is as stable as any liquid preparation of digitalis now available; and that the tincture has the systemic side actions of digitalis, including the emetic, in no greater degree than the various proprietary preparations of this drug. Strophanthin and crystallized ouabain are now available in sterile solutions in ampules and afford a convenient means of promptly securing the cardiac action by intramuscular or intravenous injection. (*Jour. A. M. A.*, December 4, 1915.)

Dr. Pierce's Pleasant Pellets.—The A. M. A. Chemical Laboratory reports that the pills responded to tests for emodin and aolin. Essentially, Pierce's Pleasant Purgative Pellets appear to be an ordinary laxative pill. That the active principal of aloes was found in the pills is of interest in view of the fact that the leaflet advertising Pierce's Pleasant Pellets warns the public against the use of purgatives composed of aloes. (*Jour. A. M. A.*, December 4. 1915.)

Nose-Ions.—The A. M. A. Chemical Laboratory reports that the circular matter for "Nose-Ions" is a crude attempt to impose on a scientifically trained profession with pseudo-scientific matter about ions, ionic dissociation and the positive and negative charges of ions. It appears that Nose-Ions is essentially an ointment consisting of a petrolatum base, containing some odorous principles such as camphor, menthol and eucalyptus, with some salicylic acid and some quinine. (*Jour. A. M. A.*, December 4, 1915.)

Ozomulsion.—This "patent medicine" long sold as a consumption "cure" has been declared misbranded under the Food and Drugs Act, the therapeutic claims being both false and fraudulent. The preparation was found to be an emulsion of cod liver oil, with glycerine and phosphorus compounds of calcium and sodium. (*Jour. A. M. A.*, December 18, 1915.)

Dr. Whittington's Treatment for Consumption. —This preparation was examined in the A. M. A. Chemical Laboratory. From the analysis it appears that Dr. Whittington's Treatment for Consumption is flavored syrup devoid of potent ingredients other than alcohol. Dr. Whittington is a member of the Medical Society of California. (*Jour. A. M. A.*, December 18, 1915.)

Rogers' Consumption Cure.—Rogers' Consumption Cure and Cough Lozenges and Rogers' Inhalant were advertised for the treatment of diseases of the lungs, etc. The government chemists reported that the first consisted of sugar lozenges, containing a small amount of gum and a trace of oil of rosemary. The inhalant was found to be alcoholic solution of volatile oil, chiefly rosemary. The government held the therapeutic claims made for these preparations false. The owners having made no

defense, they were fined. (*Jour. A. M. A.*, December 18, 1915.

Mist. Helonin Comp.—The only available information in regard to the composition of Mist. Helonin Comp., Schlotterbeck and Foss, is a statement in a circular that the active ingredients are helonin, senacin and avenin and the statement on the label that it contains 45 per cent alcohol. The alcohol content is that of strong whiskey. The practically inert drugs asserted to be contained in it would not in the least interfere with its use as a cordial. On the basis of the information supplied by the manufacturer, Mist. Helonin Comp. may be classified as an objectionable and worthless nostrum—unless we regard the alcohol as of value. (*Jour. A. M. A.*, December 18, 1915.)

Incompatibility of Quinine With Aspirin.—Experiments have shown that weak acids, such as acetylsalicylic acid (aspirin), citric, malic, acetic or tartaric acid under the influence of heat may convert quinine into its poisonous isomer quinotoxin and cinchona into cinchotoxin. The danger of the formation of quinotoxin in the body cannot be great. Ready-made mixtures of quinine or cinchona preparations with weak organic acids, should be avoided. (*Jour. A. M. A.*, December 18, 1915.)

Salvarsan Made in U. S.—Because of the shortage due to the war, salvarsan is made and offered for sale under its chemical name to physicians and hospitals urgently in need of it, by the dermatologic laboratories of the Philadelphia Polyclinic. Dr. Jay F. Schamberg, the director of the Department of Dermatological Research, states that the product made by the dermatologic laboratories has been employed on hundreds of cases with excellent therapeutic results and with no reports of accident or untoward complications. (*Jour. A. M. A.*, December 18, 1915.)

Cu-Co-Ba, Tarrant.—From the statements of the circulars, it appears to be one of the copaiba and cubeb preparations which at one time were in vogue as a routine measure in the treatment of gonorrhea. (*Jour. A. M. A.*, December 25, 1915.)

Poslam.—The A. M. A. Chemical Laboratory in 1909 found that essentially Poslam consisted of zinc oxide 12.01 parts, sulphur 6.67 parts, corn starch 22.00 parts, tar oil 15.18 parts, menthol and salicylic acid, small quantities, fatty base to make 100 parts. For skin affections which may be benefited by ointments the official ointments are as effective as the proprietary products and have the added advantage of being of known and more uniform composition. (*Jour. A. M. A.*, December 25, 1915.)

FIREPROOFING PAPER, WOOD, ETC.

Borax	12 ounces
Magnesium sulphate	9 ounces
Warm water	5 pints

This solution must be used immediately, as the insoluble magnesium borate produced will soon precipitate.—*The Southern Pharmaceutical Journal.*

THE HARRISON ANTINARCOTIC LAW CONSTRUED.

The Federal Law known as the Harrison antinarcotic law, went into effect March 1, 1915. Within a very short time a number of prosecutions under the law were instituted.

Section 8 has been considered by several United States district courts, and at least three of these courts have decided that the prohibition against having possession or control of the drugs named in the act by persons not registered, applies only to persons who import, manufacture, give away or deal in the drugs.

The prosecutions which have been brought under section 8 of the law show its importance if given a broad construction and general application, but grave constitutional questions are involved.

Two of the decisions referred to are printed in the *Public Health Reports*, January 21, 1916, pages 141 and 143.

NEWS

No Smallpox in Tyler.—The health department of Tyler reports that at the present time there are no cases of smallpox, typhoid fever, or scarlet fever in the city. There was one case of diphtheria, but that has recovered.—*Tyler Courier-Times.*

Misuse of Red Cross.—Complaint has been made to the Attorney General of the United States that a number of physicians of Saginaw, Mich., are violating the law prohibiting the use of the Red Cross emblem by having it emblazoned on their automobiles. An inquiry into the charges will be made.—*Medical Record.*

Typhus in Mexico.—Recent reports from Mexico indicate that the present situation there in regard to typhus fever rivals that of Serbia last year. It is said that in Mexico City alone during December there were 30,000 to 50,000 cases of the disease, and that the Mexican Government having refused outside help is endeavoring to suppress the facts.—*Medical Record.*

Emergency Hospital for First Aid at Dallas' New Station.—An emergency hospital for first aid treatment will be installed in the new union station at Dallas. It will occupy quarters on the first floor at the north end of the building, and will be equipped with everything needed for first class treatment. A trained attendant will be in charge.—*Waco Times Herald.*

An Aerial Ambulance.—The use of aeroplanes as ambulances by the French army during the recent retreat from Serbia has been reported. A number of wounded soldiers were just behind the line of retreat, it is said, and it was found impossible to carry them on stretchers Six aeroplanes were thereupon pressed into service and the transfer was successfully accomplished.—*Medical Record.*

New Baptist Sanitarium for Waco.—The Baptists have purchased a piece of land with a frontage of 337 feet and a depth of 350 feet, in Waco for the erection of the new Baptist Sanitarium. The first building will cost not less than $100,000, and will be a fire-proof structure, of modern construction, and will be equipped with the latest and most scientific appointments. Other buildings will be added as needed. The sanitarium will be operated along the same lines as the one operated by this denomination in Dallas.—*Waco Times Herald.*

New Editor for American Journal of Orthopedic Surgery.—The American Orthopedic Association announces the appointment of Dr. Mark H. Rogers, Boston, as editor of *The American Journal of Orthopedic Surgery*, the only periodical in the English language devoted to Orthopedics. This Journal, which has now completed 13 volumes as a quarterly publication, will henceforth be issued monthly, the first number in the new form being that of January, 1916.

The office of publication has been transfered from Philadelphia to Ernest Gregory, 126 Massachusetts Ave., Boston. The subscription price is $4.00 per year.

Federal Quarantine for New York.—A Washington dispatch, dated January 12, brings the gratifying announcement that the New York quarantine

station is to be placed at once under Federal control. The transfer is a temporary one, made at the suggestion of Governor Whitman, to continue until the New York Legislature can take the necessary steps to make it permanent. Surgeon General Blue has detailed Dr. F. E. Cofer of the Public Health Service to take over the station. At a meeting of the New York Academy of Medicine four years ago, Dr. Cofer delivered an eloquent and convincing address in advocacy of the national control of the quarantine station at this port, and it is therefore most fitting that he should be the first federal official to be placed in command of the station.—*Medical Record.*

Chiropractor Denounced.—R. D. Lytel, a chiropractor at Rochester, is reported to have been denounced recently at a corner's inquest for malpractice on the deceased, a man named Wilkinson. Wilkinson, according to testimony, had been ill for some months and was persuaded to go to the chiropractor who placed him on a table and with his knee made what was called a "spinal adjustment." It was stated that paralysis from the waist down followed this treatment, and physicians who were then called found that the patient's back had been broken. The autopsy showed that the patient had been suffering from gastric ulcer and peritonitis. The health commissioner of Rochester is quoted as saying: "For a chiropractor to have worked on this man in the condition he was in, was nothing short of murder."—*The Pennsylvania Medical Journal.*

Old Mint at New Orleans to be Used as Sanitarium for Consumptives.—Officers of the Louisiana State Anti-Tuberculosis Association announced January 19, that plans were under way to transform the United States mint building here into a hospital for the treatment of persons suffering from tuberculosis. For several years the building has been used only as an assay office. This office, it was said, will be removed to the customs house.

Announcement of the plan to convert the building into a tuberculosis hospital was made following the visit here of R. W. Woolley, director of the mint at Washington. Officers of the anti-tuberculosis society said the Louisiana congressional delegation shortly will take up the matter of the transfer of the property with Secretary McAdoo.—*Beaumont Enterprise.*

Pure Food and Drug Department Wages Campaign Against Impure Drugs.—As a result of a campaign waged by state pure food and drug commissioner R. H. Hoffman against the sale of a substitute for aspirin, 200.000 five grain tablets of the substitute have been seized, the seizures having been made in nearly every large city in Texas. Several hundred pounds of an adulterated aspirin powder compound have also been seized. The price of aspirin has been sent up to $8 per pound. The substitute brought $7.50 a pound. Analysis of the substitute showed that it was nothing but sugar of milk costing 22 cents a pound.

Commissioner Hoffman has evidence to show that one man cleaned up over $10,000 in selling the substitute. A number of prosecution are expected.—*Beaumont Enterprise.*

New Modern Hospital for Tyler.—The contract for the erection of the King's Daughters hospital at Tyler, which will be owned jointly by the city and county, has been awarded. The hospital is to be finished within ninety days. The new hospital, while not as large as some will be modern in every respect. The building will face the south and will bear a general appearance of the Alamo.

It will be of one story hollow tile construction. The interior arrangement is such that the hospital will have an operating room, anesthesia room, four private wards, open for the use of all reputable physicians of the city or county, a free ward large enough for twelve patients, baths, toilets, dining room, pantry and a basement to contain the heating plant.

A convalescent court will face the south for the use of the patients and taken altogether, the hospital will be modern and up-to-date in every respect.

The affairs of the hospital will be managed by a board to be appointed ointly by the city and county. The King's Daughters will have representation on the board.—*Tyler Courier Times.*

Congress Asked for Fund to Check Pellagra in South.—Pellagra has become such a menace in the South, Secretary McAdoo on January 4, asked Congress for a rush appropriation of $100,000 for studies and demonstration work in rural sanitation, with a particular view of checking that disease and typhoid fever. He submitted a report from the public health service, which said:

"Increases in demonstrations are urgently required to prevent pellagra from becoming a veritable scourge in many rural communities. In Mississippi alone there were 10,954 cases and 1,024 deaths from pellagra last year, and in certain other states it has exceeded tuberculosis as a cause of death. It is estimated that there have been approximately 75,000 cases of pellagra throughout the country this past year, with more than 7,500 deaths."

The report states that the country population has not kept pace with urban communities along sanitary lines and that improper food has been shown to have had a profound influence on health of populations and to be directly responsible for the increasing prevalence of pellagra.—*San Antonio Light.*

American Physicians to Fight Typhus Fever in Mexico.—An expedition of American physicians will start from Laredo, Texas, south into Mexico to fight the typhus fever epidemic as soon as permission can be obtained from the Mexican de facto government, according to an announcement made in El Paso in January, by Dr. Carlos Husk, chief surgeon for the American Smelting and Refining Company. The expedition will be headed by Drs. Liebman and Olitsky, of Mount Sinai hospital, New York, and Dr. Husk. The Guggenheim interests are reported to be financing the campaign.

Compiled reports to federal officials show there are at least 100,000 cases of typhus in Mexico, Aguascalientes alone having five thousand. Out of a population of twenty thousand in Pachuca 1,890 died in December. The number of cases in the states of Chihuahua and Sonora are unknown.

The American physicians plan to combat the disease with the same methods used so successfully in Serbia recently.

Once in Mexico they will encase themselves in silk underclothing with outer garments of linen, which will be fastened to their legs and rubber-gloved wrists by bands and adhesive tape. They will wear rubber boots, about the ankles of which bands of crude oil will be painted to keep off the vermin.

Frequent baths of equal parts of kerosene and vinegar also will be used. The silk underclothing is listed as "very important." as the body vermin which are held solely responsible for communicating the disease, have no affinity for silk.

The kerosene and vinegar baths will be applied to suspects and patients in addition to the use of a serum specific treatment.

In the meantime the El Paso County Medical Society, including in its membership physicians attached to municipal, state and national health services, discussed measures to prevent the entrance of the disease into the United States.—*Beaumont Enterprise.*

SOCIETY NEWS.

EL PASO DISTRICT—No. 1.

Dr. F. P. Miller, El Paso, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, El Paso, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

El Paso—Dr. C. F. Braden, El Paso; 1st and 3rd Mondays, September to May inclusive.

Reeves-Ward-Pecos—Dr. O. J. Bryan, Pecos.

THE EL PASO COUNTY MEDICAL SOCIETY met in regular session January 3. Twenty-four members were present. New members were elected as follows: Drs. F. L. Arguelles, G. B. Calnan, Jose Molinar y Rey, B. E. Galloway, C. H. Mason and A. M. Horner, all of El Paso. The by-laws were amended so as to raise the local dues to $7.00. The committee on program was appointed, consisting of Drs. J. A. Pickett and W. L. Brown. The secretary was instructed to communicate with our senators and representatives informing them of the endorsement by the society of the recent resolutions adopted by the Southern Medical Association. Dr. A. E. Barrett, a member of Potter County Society, was present.

The program was as follows: *Annual Address* by the President, Dr. E. R. Carpenter; *Reports from the Eastern Clinics*, Drs. F. P. Miller and R. L. Ramey.

THE EL PASO COUNTY MEDICAL SOCIETY met in El Paso, January 17, with 26 members and visitors present. The visitors were: Major Willard E. Truby, Capt. G. V. Rukke, Capt. E. G. Huber, Capt. G. H. Lambe, Dr. Feton Norman and Dr. Wm. H. Lloyd, all of the United States Army, and Drs. Wm. Mac Lake, County Health Officer, Silver City, N. M.; Dr. Carlos E. Husk, Chief Surgeon Medical Department American Smelting and Refining Company, of Mexico, and Dr. W. W. Waite of El Paso.

Dr. W. M. Branch reported a complicated case of labor, which was discussed by several.

Dr. F. P. Miller read a paper, *Bicepital Ribs*. Dr. Hugh White in discussing the paper, said that the case presented the appearance of wry-neck, but a little investigation would demonstrate clearly that it was not that. The child has double curvature and pressure symptoms from the nerves of the arm, and is in a very serious condition. Dr. M. B. Wesson said that up to about six years ago there had been only forty such cases reported.

Dr. C. F. Braden read a paper on *Surgery in El Paso*, which was summary of the annual report of surgical cases occurring in the county during 1915. Following a general discussion of the subject, a motion was adopted that the society in reporting such cases, adopt a system of nomenclature used in Washington, in the Bureau of Statistics, Department of Commerce.

Dr. Carlos E. Husk of Mexico, extemporaneously discussed at some length the subject of typhus fever and typhus serum. He said, in part, that he knew very little about the disease, except in a general way, but had had some experience recently in treating and in nursing it. He was sent by his company to New York to investigate the serum prepared by Plotz, Rolinsky and Baer, in the Mt. Sinai Hospital, and reported in the *Journal of Infectious Diseases*. He spent a week in the Hospital, studying the serum, its effects and method of administration. The serum is prepared from the endemic cases found in New York City, called Brill's Disease. Dr. Husk was allowed to take with him 300 doses of the serum, for the inoculation of the employees of his company. Each dose consists of four in'ections, given at five day intervals. The first injection contains 500,000,000 bacteria; the second, 1,000,000,000 bacteria; the third, 1,000,000,000 bacteria, and the fourth, 2,000,000,000. The bulk ranges from ¼ c. c. to 1 c. c. The interval between injection should not exceed 8 days, and if there is no fever reaction, the interval may be shortened to 3 days. The injection is preferably given over the deltoid, the volume being small. Dr. Husk stated that from the best reports, he was sure that there were at the time fully 100,000 cases of typhus in Mexico, and that there are 5,000 cases in the city of Aguascalientes, alone. In the city of Pachucah, there were during the month of September, 1,980 deaths from this disease. Conditions are reported simply terrible in the city of Mexico. There are no reports of cases north of Torreon, although there are doubtless scattered cases in the larger cities of that region.

Dr. Husk stated that so far as he knew, he was the only living person who had been given four doses of the vaccine. He stated that the injection made the arm sore, but that there was little reaction, not as much as in the case of typhoid inoculation, the reaction consisting principally of a moderate amount of malaise. Dr. Husk is sure that the endemic and epidemic types of the disease are from the same cause, and recites the fact that an attack from Brill's disease gives immunity to the epidemic type. However, investigation has not covered sufficient time to know just what the period of immunity is from either the disease or the inoculation with the serum. He stated that the disease is milder in the Northern part of Mexico, because the lice cannot live so well in that climate.

Dr. Husk read the following bulletin, which he had prepared following his investigations, and which was intended to serve as instructions to physicians in the employ of his company, who might have to deal with the disease:

"Wear silk underclothes including sox. Lice are loathe to crawl over or take up quarters on a person wearing silk. *Very important.*

"Clean head and hairy parts of body by using a solution equal parts kerosene and vinegar. Kerosene kills lice, vinegar kills nits. Wrap up affected parts after rubbing thoroughly with this mixture for one hour only —longer use will scald. Wash off 12 hours later with carbolic or tar soap. Repeat operation in 24 hours, to be sure none have escaped first treatment.

"Wash or spray all infected quarters with solution of kerosene and hot soap-suds equal parts.

"Boil all infected clothing and bedding.

"Have manta or linen suit made to cover your entire body to neck. This can be done by lying down on a piece of cloth marking out your outline. Doubling this pattern, sew sides together, put a gathering or puckering string at neck or top. This suit should include legs and feet and arms down to wrists. Paste strip of adhesive around open ends at wrists and use rubber gloves on hands. Over this suit put on boots, rubber preferred, paint a band around these at ankles with crude oil to prevent lice crawling up from floor.

"Sprinkle powdered creolin around your neck and waistband or use a cloth saturated with kerosene solution.

"Be careful of your head contact, as this is the only unprotected part.

"Either boil these clothes after visits on returning from infected places or place same in closed box, in which a small can of chloroform is emptied and after 12 hours all inhabitants are killed.

"Use plenty of kerosene, it's the BEST preventative.

"Carry out extensive bathing, spraying and cleanliness with your workmen, families and quarters.

"All you have to do is to kill all lice in your camp.

"Be energetic and use all measures to gain this end."

Dr. J. W. Tappan, El Paso, A. A. Surgeon, United States Public Health Service, in discussing the subject read a number of letters that had passed between Dr. C. C. Pierce, of the Service and himself, in regard to the border situation, from which the following excerpts are taken:

"January 2, 1916. (Dr. Tappan to El Paso Chamber of Commerce). "The Immigration Service has had an Inspector in Juarez making a house to house canvass during the past week, and we have been unable to discover any case of typhus in Juarez. The various hospitals in which the wounded are confined are in excellent condition, and they have no contagious cases, as you see by the statements enclosed."

"***The case of typhus we had here, was imported from Piedras Negras through the port of Eagle Pass, the patient having made an illegal entry into the United States, by smuggling himself into the country. Extra precautions are now being taken at all the lower border ports, and a similar occurrence is not likely to happen. All entries into the United States at these ports are now being disinfected both as to their persons and baggage. Their clothing is also sterilized to kill lice."

"Eagle Pass, Texas, January 11, 1916. (Dr. Pierce to Dr. Tappan). ***At Laredo and Eagle Pass, we were fortunate in finding a French autoclave or steam chamber on the Mexican side, which could be repaired and used; this was done in each place, and all clothing and baggage of persons coming from anywhere in Mexico are sterilized by heat before the passenger is allowed to come to the American side. When the passenger is undressed, he (or she) is made to wash the head and all hairy parts of the body with pure gasoline. This does not cause any disagreeable sensation, and so far we have had no trouble in enforcing this practice. I must mention one exception: Today three women were overcome by gasoline fumes, causing a short fainting spell, but this because the employee had them in a small tightly closed room with no windows or doors open. We now have two windows open in this room with a curtain over the windows and anticipate no further occurrence of that sort.

"This work is being done on Mexican territory and largely by Mexican employees, but we have a trusted attendant present during the work, and the certificates given are initialed by our own man. Tags are fastened to blankets so that no substitution can be practiced; gummed labels are pasted on suit cases or valises, so that they cannot be opened; and the passengers must come to the American side the day his effects are disinfected.

"Good leather suit cases that would be damaged by steam or dry heat are not passed through the chamber, but are washed out with gasoline; straw or cloth valises are passed through. We get a temperature of 230° F, and maintain it for 5 or 6 minutes; this will kill all lice, eggs and nits.

"All passengers are not subjected to this treatment; clean, well dressed American or other similar 'first class' passengers have no treatment; except that at Laredo, the State Quarantine Officer disinfects the baggage of such persons on the American side, with sulphur, for which a charge is made. He tells them, however, that they can get it done free of charge by returning to the Mexican side and having it done by the Public Health Service, but they prefer to leave their effects with him and pay a small charge. He does nothing to the person of such passengers to free them of any chance infection of lice. I have taken the stand that these persons are not habitual carriers of lice and that any stray louse that should happen to get on such a person will soon be destroyed by his bathing, and by sending his clothes to the laundry.

"At Brownsville conditions are somewhat different, as there was no plant on the Mexican side that could be used. The Mexican authorities, however, agreed to establish the plant, and to buy some sort of sterilizing outfit. A dry heat apparatus was recommended and, as it could be made locally by a sheet metal works. As soon as this is completed, and tried, I will let you know whether or not it is satisfactory.

"You will notice that no reference has been made to detention to complete 12 days from time of departure from an infected place. There is no way that we can decide which places are infected at present; also it does not accomplish anything to send the person back to the Mexican side, to remain there without inspection or any sort of supervision for 12 days. If we sent all such back, it would only be a question of time until we infected the Mexican towns along the border, as passengers would be kept there without disinfection, or if they were freed from vermin they would become re-infested during their stay and if any should develop typhus, local lice would get infected.

"I have been urging the officials at Nuevo Laredo, Matamoros and Piedras Negras to clean up their towns; not by collecting trash on the streets but by sterilizing the clothing and effects of all soldiers, prisoners and the large number of vagrants that have been remanded for one cause or another. I have also urged them to disinfect at the plant all the local hospitals bedding and mattresses, and our officers at the corresponding American ports are going to keep after them to do this work. We have been telling them that if typhus infection should develop in their town that probably the bridge would be closed, and thus serious business loss ensue.

The Bureau Telegram also stated that vaccination should be performed upon all arrivals from Mexico that were not well protected.

"I would suggest that you plan out what is necessary to establish a disinfecting plant on the American side, in case it should be necessary on account of further political trouble in Mexico.

"I would also decide upon a site to locate a detention camp, and make a list of what equipment you would require, in case one was established; how many employees would be needed, their salaries, etc., so that if the Bureau later calls upon you for that data, you would have it all ready."

"Laredo, Texas, January 13, 1916. (Dr. Pierce to Dr. Tappan). Hamilton has been doing a lot of good work here since I left; cleaning up from 200 to 250 Mexicans a day at the disinfecting plant we have at Nuevo Laredo, and one day the number was 308.

"The Mexican officials at Nuevo Laredo are sending back into Mexico all those that are refused entrance here, and all vagrants they pick up on the street, and before sending the vagrants back they are being freed from vermin. It will help considerably to get rid of this dangerous class, and keep them away from the border. No more military passes are to be given Mexicans to come up this way; so I am informed, which will also help."

"El Paso, January 17, 1916. (Dr. Tappan to Dr. Pierce). There are no trains running from the interior regularly now. What few trains come in carrying Americans and Mexicans of the better class do not come over the border; the passengers get off at Juarez and come over on the street cars. This is our greatest danger here; street cars make the round trip through Juarez every 20 minutes from 5 a. m. to 12 p. m. Many, if not most, of the domestic servants in El Paso are Mexicans who live in Juarez. The residents of Juarez are allowed to come and go at will. The races are on in Juarez every day except Monday, and crowds go over from El Paso and return. You will see that we have a somewhat different problem here from the lower border ports, if anything should start.

"Our present method is to depend, insofar as we can, on the authorities in Juarez to free the town of disease, not relaxing our inspection here, of course. Those afflicted with pediculosis are certified to the Board of Special Inquiry and returned to Juarez. There are no cases of typhus in Juarez now, that I have been able to unearth. This does not mean that there may not be some cases hidden out from us, as it has been the custom of the Mexicans to do.

"I have seen perhaps 50 cases in Juarez in the past 7 years. I know it is endemic over there, and

I am quite positive the disease is endemic on this side, in its milder form. I believe that I am justified in making this statement in view of the fact that we have a fever here which does not give a typhoid or a paratyphoid agglutination, and which drops by crisis or a quick lysis. It is diagnosed locally as typhoid, paratyphoid, Rio Grande fever and slow fever. I am quite sure 'Brill's disease' is with us here endemically—sporadically it is true, but nevertheless endemic. Dr. Waite of the Crouse Laboratories, here informs me that he gets the Widal reaction in less than 30 per cent of the so-called typhoids, and the same is true of paratyphoid.

"The old timers in this vicinity call this fever Rio Grande fever, and say it is over in two weeks. In my judgment this is typhus in its milder form. Not every fever here is typhus, of course, because we have Malta and others fevers in this vicinity, but I know we have typhus, the milder form it is true, but nevertheless typhus.

"Hamilton no doubt will know that this is true, as must every physician in our service on the border who is doing private practice. If you should come here, or go to the border ports west of here, you will find that we have to depend much more on what they do on the other side, for the towns are practically one. Especially is this true of Naco, Douglas and Nogales, these towns being divided merely by a street.

"The Mexican I wrote you of, died yesterday. Necropsy showed nothing particular, other than changes one would expect in any severe fever. It was epidemic typhus. He smuggled in through Eagle Pass two weeks ago. There are no other cases here, and none in Juarez that we can find.

"The Immigration Service has had during the past week, and still has, an inspector in Juarez trying to discover any cases. The article that you saw in the *San Antonio Light* is an absolute falsehood; the same article appeared in the *Kansas City Star*, and no doubt has been copied extensively all over the country. I should be glad if you would reassure the Bureau on this point."

"Laredo, Texas, January 17, 1916. (Dr. Pierce to Dr. Tappan). "***In regard to vaccine for typhus, so far as I know it never has passed the experimental stage, so that no one knows whether it is of value or not. I wrote the Bureau about this to find out if there was anything new in regard to the prophylactic or curative use of a typhus vaccine, but have not had a reply."

"Laredo, Texas, January 19, 1916. (Dr. Pierce to Dr. Tappan). I wish there was some way that we could get all your Mexicans 'cleaned up' before they are turned loose on our side. Certifying for pediculosis to the Immigration is all very well, but no doubt many of the passengers have 'piojo blanco' eggs, nits and possibly adults in the seams of their underclothes—(or do they have silk underwear?)

"Here and at Eagle Pass we have been fortunate enough to find steam chambers on the Mexican side that could be *run under our supervision*, so that we are getting our passengers in quite sterilized; bodies clean, and the clothes they had on at the time of arrival, as well as all baggage 'cooked' for ten minutes at 115° C.

"At Brownsville, Fairbanks has not yet gotten his plant at Matamoros running, but expects to have it this week; in the meantime he is having their clothing soaked in gasoline."

Dr. Tappan said that the consensus of opinion seems to be that the transmission of typhus can take place through the head louse and possibly the crab louse, as well as through the medium of the common gray-back. There is no doubt that Brill's disease is a mild form of typhus.

The subjects was further discussed by Major Truber, Capt. Rukke, Capt. Huber, Dr. Lloyd, Capt. Lambe, Dr. MacLake, Dr. Waite, Dr. Miller and Dr. McNeill.

BIG SPRINGS DISTRICT—No. 2.
Dr. N. J. Phenix, Colorado, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Ector-Midland-Martin-Howard—Dr. W. F. Johnston, Big Springs; 2nd Thursday quarterly.

Fisher-Stonewall—Dr. R. I. Grimes, Sylvester; 1st Tuesday in January and March.

Jones—Dr. A. McK. Jones, Anson; 2nd Tuesday monthly.

Knox-Haskell—Dr. Judd E. Hammond, Munday.

Mitchell—Dr. T. J. Ratliff, Colorado; 2nd Monday January, April, July and October.

Nolan—Dr. A. A. Chapman, Sweetwater.

Scurry-Dickens-Kent—Dr. J. M. Bannister, Snyder; 1st Tuesday in January, April, July and October.

Taylor—Dr. R. P. Glenn, Abilene; 2nd Tuesday monthly.

THE TAYLOR COUNTY MEDICAL SOCIETY announces the following officers elected for 1916: President, Dr. L. J. Pickard, Abilene; vice-president, Dr. W. J. Mathews, Abilene; secretary-treasurer, Dr. R. P. Glenn, Abilene; censor, Dr. L. W. Hollis, Jr., Abilene; delegate, Dr. T. B. Bass, Abilene. Meetings will continue to be held on second Tuesdays.

PANHANDLE DISTRICT—No. 3.
Dr. C. R. Hartsook, Wichita Falls, Councilor.

District Society—Dr. T. D. Frizzell, Quanah, President; Dr. J. J. Crume, Amarillo, Secretary.

Secretaries of Sections—Surgery, Dr. J. J. Hanna, Quanah; Medicine, Dr. Wade H. Walker, Quanah; Gynecology and Obstetrics, Dr. G. T. Thomas, Amarillo.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Childress—Dr. R. B. Wolford, Childress; 1st Tuesday monthly.

Collingsworth—Dr. H. B. Worley, Wellington; Tuesdays.

Dallam-Hartley-Sherman—Dr. R. L. Owens, Dalhart; 2nd Tuesday.

Donley—Dr. T. H. Ellis, Clarendon; 1st Thursday monthly.

Foard—Dr. R. L. Kincaid, Crowell; 2nd Monday quarterly.

Hale-Swisher—Dr. A. H. Lindsay, Plainview; 2nd Tuesday monthly.

Hall—Dr. W. C. Mayes, Memphis; 2nd Tuesday monthly.

Hardeman—Dr. T. D. Frizzel, Quanah; 2nd Thursday monthly.

Hemphill-Roberts-Lipscomb-Ochiltree—Dr. H. C. Caylor, Canadian; 1st Monday monthly.

Lubbock-Crosby—Dr. J. T. Hutchinson, Lubbock; 1st and 3rd Tuesdays monthly.

Potter—Dr. J. J. Crume, Amarillo; 2nd Monday monthly.

Wichita—Dr. Q. B. Lee, Wichita Falls; 2nd Tuesday monthly.

Wilbarger—Dr. Richard W. Hix, Vernon; 3rd Monday monthly.

THE CHILDRESS COUNTY MEDICAL SOCIETY met February 4th, in Childress. The following officers were elected for 1916: President, Dr. J. H. Jernigan, Childress; vice-president, Dr. J. D. Michie, Childress; secretary-treasurer, Dr. R. B. Wolford, Childress; delegate, Dr. R. W. McFerran, Childress; alternate, Dr. H. D. Barnes, Childress; censor for three years, Dr. H. D. Barnes.

The society also passed a resolution to not recognize any Life Insurance Companies except as old line, and demand $5.00 for each examination made for them.

THE PANHANDLE DISTRICT MEDICAL SOCIETY met at Quanah, January 18-19. There were about thirty members attended the meeting. The President's address on *The Edueational Value of a Medical Society* was well received.

Dr. Crume, the secretary, being absent on the first day, Dr. Hartsook was appointed secretary *pro tem.* Dr. Dickey's resignation as councilor was announced resignation as councilor was announced and the appointment of Dr. Hartsook, his successor, was commended.

The program was opened by Dr. E. L. Gilcreest, Gainesville, his subject being *Observation of Gun-*

shot Wounds in the Late Turko-Balkan and Present European Wars. He exhibited a number of illustrations, several specimens of shells, bullets, passports, etc., which were of interest. He was given a vote of thanks. Dr. S. P. Vinyard, Amarillo, presented a paper on the *Relation of the Surgeon to the Abnormal Appendix.* Dr. W. Wilson, Memphis, read a paper entitled *Are Women Human?* Dr. J. O. Wilkins, Paducah, *Diagnosis and Diplomacy;* Dr. R. R. McDaniel, Quanah, *Treatment of Disease of the Prostate Gland;* Dr. C. H. Harris, Fort Worth, *Pyelitis in Woman;* Dr. J. J. Crume, Amarillo, *Influenza and Some of Its Complications;* Dr. E. A. Johnston, Amarillo, *Medicine and Its Application to Disease;* Dr. Johnston then read a poem entitled *The Death of a Baby;* Dr. W. C. Mayes, Memphis, *Febricula and Glandular Fever;* Dr. John L. Davis, Waco, *Physical Solvency From a Life Insurance Standpoint;* Dr. W. A. Boyce, Dallas, *Cardio-Renal Diseases;* Dr. B. L. Jenkins, Clarendon, *Uterine Bleeding;* Dr. W. S. Miller, Estelline, *Some of My Experiences in Thirty-Five Years of Obstetrical Practice;* Dr. Wade H. Walker, Wichita Falls, *Ruptured Tubal Pregnancy and Surgical Treatment Thereof;* Dr. Joe E. Daniels, Wichita Falls, *Conservatism in the Female Pelvis;* Dr. A. J. Ball, Quanah, *Puerperal Septicaemia,* Dr. W. H. Ogden, Electra, *Puerperal Infection.*

On the night of the first day, at the Baptist Church, a public meeting was held, presided over by Dr. Frizzell. The audience was entertained with instructive lectures by Dr. Bacon Saunders, Fort Worth, whose topic was *Things the Laity Should Know About Cancer,* and Dr. B. L. Jenkins, Clarendon, on *Some Things the Laity Ought to Know.* Both addresses were replete with information on their respective subjects, and were presented in a most entertaining and comprehensive manner. At the close of the meeting the members and visitors repaired to the Quanah Hotel, where a banquet was held, given by the local profession. President Frizzell was toastmaster and there were a number of subjects discussed relative to society work and methods of increasing interest in same.

The society voted thanks to the local profession for the cordial reception and for the royal manner in which it had been entertained.

The officers elected for the ensuing year are as follows: President, Dr. S. P. Vinyard, Amarillo; first vice-president, Dr Q. B. Lee, Quanah; second vice-president, Dr. B. L. Jenkins, Clarendon; secretary-treasurer, Dr. J. J. Crume, Amarillo; censors, Drs. J. J. Hanna, Quanah and C. L. McClellan, Farwell. The following section appointments were announced: Surgery—Chairman, Dr. J. E. Dodson, Sr., Vernon; secretary, Dr. J. J. Hanna, Quanah; Medicine—Chairman, Dr. A. H. Lindsay, Plainview; secretary, Dr. Wade H. Walker, Quanah; Gynecology and Obstetrics—Chairman, Dr. E. F. Hamm, Clarendon; secretary, Dr. G. T. Thomas, Amarillo.

Wichita Falls was selected as the place for the next meeting.

SAN ANGELO DISTRICT—No. 4.

Dr. S. C. Parsons, San Angelo, Councilor.

District Society.—Dr. J. M. Horn, Brownwood, President; Dr. R. H. Cochran, Coleman, Secretary. Next meeting will be in Brady.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Brown—Dr. J. W. Carson, Brownwood; 2nd Tuesday monthly.

Coleman—Dr. W. M. Strozier, Santa Anna; 1st Thursday monthly.

Lampasas—Dr. J. W. Ellis, Lampasas; 1st Tuesday March, June, September and December.

McCulloch—Dr. J. S. Anderson, Brady; 1st Monday monthly.

Menard-Kimble—Dr. W. M. Fenley, Menard.

Runnels—Dr. E. R. Middleton, Winters; 2nd Thursday monthly.

Tom Green—Dr. G. W. Nibling, San Angelo; Tuesday before full moon.

The Coleman County Medical Society met at Coleman, December 8, 1915. Five members were present. The following officers were elected: President, Dr. C. M. Alexander, Coleman; secretary-treasurer, Dr. W. M. Strozier, Santa Anna; delegate, Dr. R. H. Cochran, Coleman; alternate, Dr. S. N. Aston, Coleman.

The McCulloch County Medical Society met at Brady, December 6. Four members were present. Drs. Jesse Lockhart of Eden and J. D. McCann of Lohn, were elected to membership. The following officers were elected: President, Dr. J. B. Granville, Brady; vice-president, Dr. J. D. McCann, Lohn, secretary-treasurer, Dr. J. S. Anderson, Brady; censor, Dr. J. G. McCall, Brady; delegate, Dr. O. C. Jackson, Voca; alternate, Dr. J. M. Thompson, Mason.

SAN ANTONIO DISTRICT—No. 5.

Dr. W. A. King, San Antonio, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Atascosa—Dr. W. E. Seale, Charlotte; 2nd Tuesday monthly.

Bexar—Dr. W. H. Hargis, San Antonio; from October to May. 1st Thursday, Section on Eye, Ear, Nose and Throat; 2nd Thursday, Section on Medicine; 3rd Thursday, State Medicine, Public and Personal Hygiene; 4th Thursday, Obstetrics and Gynecology.

Comal—Dr. L. G. Wille, New Braunfels; 2nd Saturday quarterly.

Guadalupe—Dr. A. H. Neighbors, Seguin; 1st Tuesday monthly.

Gonzales—Dr. W. T. Dunning, Gonzales; 1st Monday monthly.

Karnes—Dr. R. C. Youngblood, Falls City; bi-monthly.

Kerr-Kendall-Gillespie-Bandera—Dr. Wm. Lee Secor, Kerrville; 1st Monday alternate months.

La Salle-Frio—Dr. R. L. Graham, Cotulla; meets quarterly.

Medina—Dr. J. H. Fletcher, Hondo; 2nd Wednesday monthly.

Uvalde-Edwards—Dr. S. B. Hudson, Sabinal; 1st Tuesday monthly.

Val Verde—Dr. D. A. York, Del Rio; 1st Monday monthly.

Wilson—Dr. J. E. Sparks, Floresville; quarterly.

The Bexar County Medical Society on December 23, 1915, elected the following officers: President, Dr. Ferdinand C. Walsh; vice-president, Dr. P. Ireland Nixon; secretary, Dr. W. H. Hargis; treasurer, Dr. L. B. Jackson; censor, Dr. B. F. Stout; delegate, Dr. Thos. Dorbandt; alternate, Dr. D. Berrey.

The Gonzales County Medical Society held its regular meeting at Gonzales, January 3. After enjoying a luncheon at the Plaza Hotel, the meeting was called to order. Dr. Theo Dorsett read a paper on *Tonsils and Adenoids,* and Dr. T. H. Harrell read a paper on *The Drugless Treatment* of *Cardio-Vascular-Renal Diseases.* These papers were much appreciated and freely discussed. One of the members had in his possession a full page advertisement in the *Houston Post,* which was an appeal for the collection of unpaid doctor bills. This, it was presumed, had emanated from the Harris County Medical Society. A motion was made that this scheme be tried and an advertisment similar to that found in the *Houston Post,* be published in the local papers. This, however, did not appeal to a majority of those present. It was the prevailing opinion that better results would be had by using better business methods. The society adopted the resolutions passed by the Southern Medical Association, at Dallas, providing for an increase in the number of medical officers in the Army. There were eight members present.

The Guadalupe County Medical Society met in regular session Tuesday, January 4. Those present were: Drs. M. B. Brandenburg, A. H. Neighbors, N. A. Poth, R. B. Anderson, R. L. Knolle and C. Williamson.

After the usual routine of business, a paper was

read on *Lobar Pneumonia* by Dr. Neighbors. The subject proved an interesting one as all present joined in the discussion very enthusiastically. Dr. N. A. Poth was elected delegate, and R. B. Anderson, alternate. The matter of the annual banquet was postponed until later. The resolutions of the Southern Medical Association in regard to the proposed increase in the army were read and approved. The secretary was instructed to notify the congressmen in regard to the action of the society and urge them to use their influence for its adoption.

All the doctors of the county are members of the county organization except three, and every effort is being used to induce them to join.

CORPUS CHRISTI DISTRICT—No. 6.

Dr. W. N. Wardlaw, Corpus Christi, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bee—Dr. E. P. Cayo, Beeville; Monday quarterly.
Cameron—Dr. C. W. Skipper, Westville; 2nd Wednesday monthly.
Hidalgo—Dr. W. R. Dashiell, Mission; 5th day monthly
Jim Wells—Dr. M. J. Perkins, Alice.
Kleburg—Dr. R. L. Mathews, Kingsville.
Nueces—Dr. A. W. Davisson, Corpus Christi; 1st and 3rd Fridays monthly.
Refugio—Dr. Roy T. Goodwin, Sinton.
San Patricio—Dr. L. J. Manhoff, Aransas Pass.
Webb—Dr. E. H. Sauvignet, Laredo; 1st Wednesday monthly.

AUSTIN DISTRICT—No. 7.

Dr. T. J. Bennett, Austin, Councilor.

District Society—Dr. Z. T. Scott, Austin, President; Dr. W. A. Harper, Austin, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bastrop—Dr. P. Chapman, Smithville; 2nd Tuesday bimonthly.
Burnet—Dr. H. S. Garrett, Bertram.
Caldwell—Dr. L. L. Hewlett, Lockhart; 2nd Tuesday monthly.
Hays—Dr. P. J. Shaver, San Marcos.
Lee—Dr. C. S. Gates, Giddings; 1st Monday in March, June, September and December.
Llano—Dr. C. F. Darnall, Llano; 2nd Tuesday monthly.
San Saba—Dr. C. L. Behrns, Cherokee; 2nd Tuesday each month.
Travis—Dr. Edgar Mathis, Austin; 2nd Thursday monthly.
Williamson—Dr. W. G. Pettus, Georgetown; 2nd Wednesday.

THE CALDWELL COUNTY MEDICAL SOCIETY held its annual election of officers, January 11, with the following results: President, Dr. K. Alexander, McMahan; vice-president, Dr. A. F. Clark, Fentress; secretary-treasurer, Dr. L. L. Hewlett, Lockhart; delegate, Dr. D. B. Williamson, Lockhart; alternate, Dr. W. M. Pitts, Luling; censor, Dr. A. A. Ross, Lockhart.

THE TRAVIS COUNTY MEDICAL SOCIETY held its regular monthly meeting, January 13, at the Driskill Hotel.

Thirteen members and one visitor were present. A paper on *Congenital Umbilical Hernia* was read by Dr. Edgar G. Mathis. He reported two cases of this very rare condition, and gave the results of the line of treatment carried out. The paper was discussed by Drs. Bennett, Hill, Nichols and Mathis.

Dr. Bennett suggested that at the February meeting the Principles of Ethics of the American Medical Association and the Medical Practice Act be read in open meeting and possibly that some legal authority be on hand to give his opinion on the latter. Dr. Hill suggested someone from the attorney general's office be asked to speak on the Medical Practice Act. It was decided that the president select someone for this purpose.

Dr. Hilgartner thought that there should be more scientific papers read at the regular meetings; that a regular program should be printed each month and that the members should be notified two or three weeks ahead, as to the subject of the papers and those who would be expected to discuss them at the meeting. He spoke particularly of the fact that no paper on Medical Ethics had ever been read before the society, that he remembered, and he thought someone should be selected to read one. Dr. Nichols made motion to have Dr. Hilgartner read such a paper, and Dr. Bennett to discuss it, and the motion was carried unanimously, except for the vote of Dr. Hilgartner. For the good of the order, Dr. Bennett spoke of the lack of attention paid to the deaths of active members of the society and other well known medical men over the State, from time to time, and thought the society as a fraternal order should be more considerate of such matters. Dr. Gilbert thought this suggestion a good one; also, that we should wake up and take more notice of things in general. He said that we had one of the best counties in the State and that we should have one of the best county societies.

The society adjourned and a light lunch was served.

DEWITT DISTRICT—No. 8.

District Society—Dr. E. A. Malsch, Victoria, President;

Dr. Walter Shropshire, Yoakum, Councilor.

Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Colorado—Dr. W. G. Youens, Colorado; 2nd Wednesday February, April, June, August, October and December.
DeWitt—Dr. B. J. Nowierski, Yorktown; 3rd Wednesday monthly.
Fayette—Dr. C. M. Hoch, LaGrange.
Lavaca—Dr. Walter Shropshire, Yoakum; 2nd Tuesday monthly.
Matagorda—Dr. S. A. Foote, Bay City; 2nd Wednesday monthly.
Victoria-Calhoun—Dr. F. L. Sargeant, Victoria; 20th monthly.
Wharton-Jackson—Dr. W. B. Huey, El Campo; 3rd Friday monthly.

THE LAVACA COUNTY MEDICAL SOCIETY met January 12, and elected officers for 1916, as follows: President, Dr. J. E. Lay, Halletsville; vice-president, Dr. J. D. Gray, Shiner; secretary-treasurer, Dr. Walter Shropshire, Yoakum; censor, Dr. A. J. Farrell, Cistern. Regular meetings will be held on the second Tuesday of each month, during 1916.

SOUTHERN DISTRICT—No. 9.

Dr. W. W. Ralston, Houston, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Austin—Dr. Otto E. Steck, Bellville; 1st Tuesday quarterly.
Brazos—Dr. R. J. Hunnicutt, Bryan.
Brazoria—Dr. J. D. Motheral, Angleton; 1st Thursday after 1st Monday.
Burleson—Dr. T. L. Goodnight, Caldwell.
Fort Bend—Dr. R. M. Munroe, Richmond.
Galveston—Dr. W. S. Carter, Galveston; last Friday monthly.
Grimes—Dr. E. A. Harris, Navasota; 1st Wednesday monthly.
Harris—Dr. G. C. Lechenger, Houston; every Friday night.
Madison—Dr. J. E. Morris, Madisonville; last Tuesday monthly.
Montgomery—Dr. H. W. Earthman, Conroe; 2nd Monday monthly.
Waller—Dr. R. E. Bing, Waller; 1st Monday quarterly.
Walker—Dr. J. W. Thomason, Huntsville; 2nd Tuesday bi-monthly.
Washington—Dr. R. H. Lenert, Brenham; quarterly.

THE AUSTIN COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. Otto A. Trenckmann, Bellville; vice-president, Dr. John Kraulik, Bellville; secretary-treasurer, Dr. Otto E. Steck, Bellville (re-elected); censor, Dr. J. A. Neely, Bellville; delegate, Dr. Otto A. Trenckmann (re-elected); alternate, Dr. Rene F. Schoepfer, Sealy; committee on public health and legislation, Drs.

B. E. Knolle, Industry; W. T. Brown, Wallis, and Theo. Kubricht, Wallis.

The Brazoria County Medical Society met at Angleton, December 16, 1915. The following officers were elected: President, Dr. Marcus A. Weems, Columbia; vice-president, Dr. C. C. Hampil, Brazoria; secretary-treasurer, Dr. J. D. Motheral, Angleton; delegate, Dr. F. R. Winn, Alvin; alternate, Dr. M. L. Weems, Brazoria.

The Harris County Medical Society met in Houston, December 4, with 49 members and 3 visitors present.

Dr. John T. Moore reported a case in which he found the plasmodium of malaria, following quinine, which condition he says is quite common. Quinine had been given 15 grs. per day, both before and after the test, and while the fever was no longer present, the plasmodia were still in evidence. He also reported a case of cyst of the appendix, and showed *x*-ray plates of the case. This case was discussed by Dr. Thorning. Dr. Moore also reported a case in which he had recently resected a large amount of illium. The patient died 16 days after the operation, from inanition.

The Harris County Medical Society met in Houston, December 11, with 47 members and 3 visitors present. Dr. C. C. Cody reported two cases, one in which there were diverse symptoms, culminating in convulsions, probably hysterical; the other, blood in the urine, following exposure to cold, whenever the exposure occurred. This case was diagnosed as probably localized nephritis or papilloma of the bladder.

Dr. G. H. Moody, San Antonio, President of the State Association, was present and addressed the society.

Dr. C. C. Green read a paper on *Autosalvarsanized Serum in the Treatment of Syphilis.*

Dr. Moody, in discussing the paper, stated that this treatment is not now being used in tabes to the extent it formerly was, and that the whole of the treatment of this unfortunate disease is unsettled at the present time. The salvarsanized serum is probably useful in cerebral syphilis, rather than spinal, and it is in this class of diseases that the best results are obtained. Dr. Moody said he prefers to rely on mercury, following a few doses of salvarsan. More salvarsan may be given to stimulate metabolism, but it must be always borne in mind that this drug in heroic doses may do considerable damage in this class of cases. Potassium iodide is not indicated, as it tends to produce rapid degeneration.

Dr. Turner discussed the subject of mercurialized serum in tabes, and said that many practitioners were getting good results from this method, while others were getting equally as good results from injections of normal saline solution in the spinal fluid.

Dr. Greenwood said that he had never believed salvarsan would do permanent good in either tabes or paresis, and that it had been his observation that the benefits reported were usually transient. He reported a case illustrating this point, and concluded that mercuralized serum will save as many as any other treatment.

Dr. Norsworthy reported the history of the noted California cases, in which 8 were injected with salvarsanized serum and 7 died.

Dr. Green stated that the principal good to be derived from salvarsanized serum is in the early stages of involvement of the central nervous system, and that the treatment should be not too heroic. He believes that the cases generally reported cured are neither paresis nor locomotor ataxia. The treatment will undoubtedly benefit cerebral syphilis, and where there is a doubt, the patient should have the benefit of the treatment, which should be conservative and always followed with mercury.

The Harris County Medical Society met in Houston, December 18th, with 94 members and 4 visitors present. Drs. C. M. Campbell and C. S. McGinnis were granted transfers to other societies.

Dr. W. B. Thorning tendered his resignation as Editor-in-Chief of the South Texas Medical Record, which was referred to the Board of Publication.

An assessment of $2.00 per member was made for the support of the Houston Academy of Medicine.

The following officers were elected for the ensuing year: President, Dr. J. A. Kyle; vice-president, Dr. W. G. Priester; secretary-treasurer, Dr. G. C. Lechenger; delegate, Dr. A. P. Howard; delegate to fill the unexpired term of Dr. Kyle, Dr. James A. Hill; alternate delegate, Drs. C. C. Cody and E. M. Arnold; censor, Dr. E. L. Goar; censor to fill unexpired term of Dr. Priester, Dr. M. B. Stokes.

The Harris County Medical Society met in Houston, January 8, with 65 members present.

Dr. H. L. D. Kirkham reported the case of a young white man who had been in excellent health until recently, but during the past three months had suffered a regular attack of fever with malaise and headache. Two or three weeks previous he has suffered a slight attack of jaundice, which was followed by the development of petechiae over both legs, and extending to above the knee. His appetite had remained good and he had slept well, but was constipated. There was anemia of all mucous membranes, with petechial spots on the buccal and pharyngeal mucous membranes, with a slightly enlarged spleen. A mild alkaline treatment with the administration of iron resulted in some improvements. Subsequently the stools were found loaded with hookworm ova, and the patient was given the thymol treatment in broken doses. His temperature, which had been slightly elevated, now dropped to normal, but subsequently ran a typical first week typhoid fever course. Later there was nosebleed and hemorrhage from the pharynx, followed by a soft, systolic and untransmitted murmur of the apex. A blood culture at this time showed a few diplococci, but no typhoid bacilli. The right lung on the following day became flat to percussion, which was attributed to hemorrhage, and the patient coughed up organized blood casts on the following day. The patient died in a day or two following the hemorrhage.

Dr. C. M. Aves reported two cases, both of which had been under treatment for rheumatism. The first, a young farmer boy, who had never been sick until the onset of the present trouble, began to complain of pain and weakness about the knee and the right leg, in May. The pains were intermittent but increased in severity, duration and frequency. The treatment was with salicylates and probably small doses of opiates, at night. The patient had recently been unable to get about easily and had spent most of his time in bed. In December there was great emaciation, and the right leg, slightly flexed, was kept on a pillow in bed. Flexion and extension of the knee caused no pain at the joint. The femur was easily palpated, and showed the bone to be enlarged and tender over its lower half, and more tender over the inner than the outer side. *X*-ray showed an enlarged, condensed shaft, with a light area about five inches long in the middle. The white blood count was 15,960, and polynuclears 75 per cent. Operation disclosed new bone under the periosteum, about one-half inch thick, with the shaft of the bone very hard. The medullary canal was full of purulent material. Drainage was extensive for the first six days, following the operation, but subsequently subsided and the patient made a slow and uneventful recovery.

The second case was that of a boy who had in 1908 suffered with an infected finger on the left hand. A month late the patient was complaining of a constant throbbing in the left forearm, and the *x*-ray disclosed a small, subperiosteal abscess on the inner side of the ulna. The patient disappeared before operation could be had. Thirteen months later he was seen and presented the typical picture of sepsis. He had been treated for rheumatism until recently, when pus made its way through sinuses just above the wrist. *X*-ray showed osteomyelitis of the left ulna, with bone formation under the periosteum. The right hip and knee showed separation of bones by fluid. The periosteum was incised and the whole shaft and olecranon lifted out, the lower epiphysis as well as much of the new bone clinging to the periosteum, being left in place. Examination two months following the operation, showed considerable formation of new bone. The wound was still draining, but the hip and knee trouble had entirely disappeared. The arm was entirely recovered, and six months later the *x*-ray showed a rather large mass of bone extending from the wrist to and slightly around the end of the humerous. There was limited flexion and extension at the elbow, with 50 per cent rotation of the hand.

Dr. Jno. T. Moore read a paper on *Some Notes on the Clinics of Dr. Geo. W. Crile.* He gave a resume of the kinetic theory of Crile, and discussed the practical applications in Crile's clinic. The principal item of interest was the mental attitude of calmness and confidence induced in the patient, by the absolute, machine-like smoothness in the work of preparing for operation, the patient knowing nothing of the usual flurry and confusion incident to similar procedures in most hospitals. He urges the necessity of standardizing preparations in an effort to eliminate confusion, and discussed the use of opiates and local anesthetics, both of which he advocated.

Dr. W. B. Thorning in discussing the paper, stated that he had observed the work of Crile two years before the publication of his theory, and was impressed because of its newness. He said that undoubtedly most of Crile's success is due to the perfection of his technic and to his own skill as an operator. Dr. Thorning thinks the question of anesthetics is still unsettled. He does not consider gas more dangerous than ether. He agrees with Crile that the character of anesthetics to be given by a novice is in the following order: Ether, chloroform and gas, although the last named in the hands of an expert, is close to the ideal.

Dr. Patterson stated that he had seen most of Crile's experiments in their development. In the latter part of his work, the theories of Yandel and Harrison had prepared the way. Dr. Patterson too, thinks the big thing in Crile's success is Crile himself, although the mental attitude of the patient is undoubtedly important. He believes in morphine, also.

Dr. S. C. Red thinks the word "anoci" and "bene," applied to this theory, are confusing. He does not agree with Crile that in his belief that nervous force is electrical. He does not think that local anesthesia prevents impulses from reaching the brain, largely because of his own experience, wherein he suffered shock within an hour following an operation under local anesthesia. He thinks the local anesthesia delays but does not stop the passage of impulses. He thinks Crile's fine results is due to Crile's skill as an operator.

Dr. King thinks Crile's success largely based on the use of morphine, which inhibits reflex action. He thinks shock is due to congestion of nerve centers and has, because of this idea, been using morphine and hyoscine before operating, since 1897. He finds a patient under the influence of these hypnotics is not affected by the noise and confusion of the hospital.

Dr. Blair thinks the whole matter but a degree of Christian Science, and that Crile's success is due to his skill and to the morphine he uses.

Dr. Eskridge agrees that the confusion in the operating rooms is disconcerting, but thinks it would be difficult to standardize this work, particularly in public institutions. She has used nerve blocking in her work, and likes it. She thinks the use of morphine will largely eliminate the bad effect of noise and confusion in the operating room.

A paper written by Dr. S. A. Foote of Bay City, entitled "*The Evils of Espeshilizin, by Bill Piper of Skagtown,*" was read by Dr. Van Zant, in the unavoidable absence of the author. The paper was humorous and quite enjoyable. A vote of thanks was extended Dr. Foote for his kindness in preparing and presenting the paper.

Resolutions of condolence because of the death of Dr. Forrest B. Smith, and the young son of Dr. J. D. Duckett, were adopted and ordered spread upon the minutes of the society.

The Harris County Medical Society met in Houston, January 15, with 65 members present.

Dr. J. E. Thompson, Galveston, on special invitation read a paper on *The Rational Treatment of Infected Wounds.* While the paper had general application, the reference was principally to wounds received on the battle field. The character of the infection, the depth to which the infection is driven by the cause of the wound, the long period of waiting, the sanitary conditions surrounding the wounded, the drying up of secretions from the wound, and the deoxidization of the tissues by the growth of certain bacteria, all tend to produce favorable conditions for the growth of such anaerobes as the gas bacillus, and the tetanus bacillus, as well as the streptococci, which are facultative anaerobes. In the treatment of such wounds, the principal requirements is the freest possible drainage, with wide openings, extending into every cavity of the wound, the double object being to allow the escape of the products of infection, and to give opportunity for thorough oxidization. The administration of hypertonic salt solution, with which the wound should be thoroughly and constantly bathed, was recommended. Dr Thompson does not recommend very highly the ordinary antiseptics, except peroxide of hydrogen, which is of advantage because of the amount of free oxygen it will give off. The use of this agent in cavities where there is not room enough for the escape of the gas, should be avoided.

Dr. O. L. Norsworthy agreed with the author as to the method of treatment, and urged the use of light dressing. He said that the use of serum had been urged, but that it was difficult to prepare a serum to meet the individual case. He had seen no recoveries from gas bacillus infection. He thinks that Bier's hyperemia, and sponging with 50 per cent alcohol, gives good results during the infective stage, but the hyperemia should be avoided after the infection has been stopped.

Dr. Cooke thinks the incubation period of gas infection is so short that the use of vaccine, except as a prophylactic, is hardly warranted.

Dr. R. W. Knox does not think the old time method of using antiseptics is much practiced now, and that free drainage, the use of moist heat applied by means of blanket dressings, kept wet and frequent changes, will answer the purpose, particularly in bady lacerated wounds, in which separation of the slough is aided and general sepsis prevented.

Dr. John T. Moore called attention to the work of the elder Dr. Graves, many years ago, who had commended the use of salt solution in the treat-

ment of wound infection. He thinks the common use of antiseptics really does harm, in that the practice serves to lower the vitality of the patient. He thinks nature will attend to the matter more promptly and effectively, under favorable circumstances.

Dr. S. C. Red said that whatever method brings the serum to the surface is efficient, whether it is Bier's treatment, heat, or salt solution. He thinks there is entirely too much tendency to discredit antiseptics. He said that turpentine would inhibit the growth of bacteria, and he could see no reason why it should not be used.

Dr. Blair called attention to the resisting power of tissues, and agreed that heat is better than the usual antiseptics.

Dr. P. W. Covington, representing the International Health Commission, was present and presented his plan of carrying on a propaganda for the improvement of the health of the rural population of the county, and requested the endorsement of the society. The society readily granted the request and extended the endorsement by unanimous vote.

The Harris County Medical Society met in Houston, January 22, with 68 members present.

Dr. J. D. Duckett reported a case, in which there appeared to be a typical diphtheritic membrane, and from which he made the diagnosis of diphtheria. He gave 10,000 units of antitoxin immediately, and within twenty-four hours gave 20,000 more units. The diagnosis was confirmed clinically by Dr. Foster, but two swabs sent to the city pathologist were reported as showing nothing but streptococci. The patient responded to the antitoxin.

Dr. J. H. Foster said he was unwilling to depend upon the pathologists report that the case was simply one of streptococcic infection, because of the typical, thick membrane in the nose and throat, such as he had never seen except in diphtheria. He urged that in such cases pieces of the membrane itself should be used, from which to make cultures.

Dr. C. U. Patterson reported a similar case, in which he had used 85,000 units of antitoxin in 52 hours, before improvement began to show.

Dr. E. F. Cooke called attention to the fact that the longer the interval from onset of the disease to the administration of the antitoxin, the more antitoxin would be necessary.

Dr. R. H. Moers reported a case of a man who, except for an attack of malaria, in Cuba during the Spanish-American War, and the present illness, had been in the best of health since childhood. For fifteen years past he has been suffering from what he describes as indigestion or stomach trouble. He complains of feeling bloated, palpitation of the heart, difficulty in breathing, sees specks before the eyes, belches a good deal, from which he gets some relief. There is no pain, and no nausea or vomiting. Self-induced vomiting relieves these symptoms and the patient is able to go to his work feeling good. The attacks bear no relation to meals, and he never has an attack at night, although he eats his heaviest meal in the evening. In the beginning, the attacks came about once a month, but of late years they have been more frequent, until now they occur two or three times a week. During extremely severe attacks, the patient suffers from cold extremities, and cold sweat over the entire body. The attacks last about ten minutes, during which time the pulse is imperceptible, and the patient remains unconscious. The bowels are constipated and the patient uses mild cathartics to keep them open. He occasionally suffers from headache when the bowels are not open. The appetite is good, and he sleeps well, but is inclined to be nervous. Gastric analysis, following a test meal showed a hypoacidity. Blood pressure is 130. A treatment of tincture of nux vomica and dilute hydrochloric acid, produced some improvement. There was some tenderness over the appendix, and the case was eventually diagnosed as chronic appendicitis with pylorospasm, and a bismuth meal advised. The *x*-ray revealed pylorospasm, with bound down appendix constricting the ileum, and three loop of the jejunum adherent to the spleen. Operation disclosed the condition as indicated, with a distinct Lane's kink. Three loops of the jejunum were found adherent to the spleen. A short time after the operation, the patient had a hemorrhage from the stomach.

Dr. Moers gave as a probable cause of the postoperative hematemesis, either the anesthetic, injury to the stomach and duodenum from handling, injury to the omentum from either handling or ligation, with consequent thrombosis of the omental vessels, and embolism of the stomach wall. Rodman, he said, suggests sepsis as one of the causes, while others dispute this theory. Some say that hemorrhage may be caused by reflex nervous influence.

Dr. John T. Moore thinks that the hemorrhage may be explained by the presence of a small gastric ulcer, which might easily be overlooked. Such an ulcer, with peritoneal involvement, might also explain the splenic adhesions.

Dr. Greenwood reported five cases in which he had seen hematemesis following operation, and thinks the hemorrhage might possibly be of reflex origin, following handling of the spleen.

Dr. L. Daily reported a series of cases of malaria, which were interesting from the protean character of their manifestations. One of the cases resembled appendicitis, another produced a rash resembling that of scarlet fever, and several cases in the same family were of a more serious type than common, with one death.

Dr. C. U. Patterson read a paper on *Gastric Ulcer*. He reviewed the history of the disease and discussed the etiology. He claims that the disease is more frequent in women than men, usually coming early in life in women, and later in men. Occupation has but little influence on the disease. The size of the ulcers vary, and they are single as a rule, although they may be multiple. Any condition which materially affects nutrition may be considered as etiologically important. Referring to the matter of gall-bladder infection in relation to gastric ulcer, he is inclined to believe that the ulcer comes first. The hyperacidity is not considered of any particular importance. He thinks laboratory findings in these cases are worthless, and the introduction of the stomach tube may produce great harm. In the diagnosis, the history of pain coming at a certain time following meals, is important. Must differentiate from gall-stones and dilatation with hyperacidity, as well as carcinoma. Indications for surgery are few, and may be designated as excessive hemorrhage, perforation, narrowing of the pylorus by scar or hypertrophic tissue and the so-called periulceration. In the treatment, the patient should be kept quiet and the pain relieved with an ice bag over the stomach. A teaspoonful of bismuth nitrate in a half glass of warm water should be given in the morning, and the patient should lie on the right side for one-half hour. A mixture of sodium sulphate, sodium phosphate and sodium bicarbonate, in warm water, several times daily, is recommended. Belladona is recommended for hypersecretion, and the bowels should be moved when necessary, by enemata. Diet should be worked out to suit the individual needs.

Dr. John T. Moore said that the pathology of gastric ulcer had been proven, and cited Bolton's experiments on the stomach of the monkey. He thinks it a nutritional disease, with low resistance to infection. Ulcers do not heal well in hyperacid

stomachs. Hypersecretion produces gastritis, which in turn predisposes to ulcer. Treatment of acute cases is medical, but where there is retention free exit from the stomach should be provided for by surgery. He does not consider the stomach tube dangerous if properly used. He said that 74 per cent of cancer cases give a previous history of gastric ulcer.

Dr. W. B. Thorning thinks the dilatation of the stomach is due to mechanical obstruction, and that operation is indicated to relieve the condition. In cancer, if the disease is not on an ulcer base, operation will do no good. Statistics show that about 90 per cent are relieved by surgery, and of these, 65 per cent are free from return in from 5 to 15 years after operation.

Dr. E. F. Cooke, referring to Bolton's work, said that there were two factors to be considered, one the lytic substance, and the other trauma, caused by the injection. He thinks that bacteria cannot grow in acid contents, although they may be present in the stomach, having been forced there from the duodenum by vomiting. He thinks that the abnormal conditions surrounding the extraction of stomach contents, renders gastric analysis useless in most cases.

Dr. Cody thinks the diagnosis of gastric ulcer most difficult. While the stomach is the only place in the body where ulcer is said to be the starting point of carcinoma, ulcers are frequently found in the first part of the duodenum, while cancers are rare in that locality, and are more frequently in the second part.

Dr. Van Zant expressed surprise that so few *x*-ray diagnoses are made of ulcer cases, because of the extreme simplicity, and the great certainty of this method of diagnosis.

The Harris County Medical Society met in Houston, January 29, with 63 members present.

The President ruled that the office of delegate was not vacant at the time Dr. Hill was elected to fill the unexpired term, and that for that reason the election was null and void. At the same time he tendered his resignation as delegate, and suggested that Dr. Hill be re-elected legally. This was done, and Dr. Hill declared elected accordingly.

Dr. Green reported a case in which he had removed the left kidney in August, which contained a stone and several tuberculous foci. The patient made a good recovery, but returned in November with symptoms of stone in the right kidney. The diagnosis was confirmed by the *x*-ray, which means of diagnosis had failed in the first case. The patient was operated on under local anesthesia, and the stone forced back through the calyces, and removed through a median incision. In ten days the urine was clear and the patient made a good recovery.

Dr. J. B. Legnard said that it was not uncommon for urate stones to fail to give shadows with the *x*-ray. In the bladder, such a stone can be caused to make a shadow by inflating with nitrogen gas. Dr. Cody showed a specimen of primary adenocarcinoma, taken from the submaxillary region.

Dr. Harwood reported a case of burn from gasoline, in which the eye had been injured. A paralysis of the sphincter of the eye resulted, which he thinks is the result of the injury to the sensory nerves of the nose.

The following were elected members: Drs. R. T. Scott, T. A. Dickson, L. M. Ellis and F. R. Lummis.

Resolutions were adopted commending the administration of the present city health officer, and particularly his recommendations as to changes in the administration of the health department.

A vote of thanks was extended the W. B. Saunders Company, and Mr. Henser of the J. A. Majors Company, for liberal donations to the society library.

A committee consisting of Drs. J. H. Foster, W. B. Thorning and J. E. Hodges, was appointed to plan a system of listing the clinical work done in Houston, with a view of inviting visiting physicians to make use of such as were open to them.

SOUTHEASTERN DISTRICT—No. 10.
Dr. A. R. Sholars, Orange, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Hardin—Dr. Lee Selman, Olive; last Saturday monthly.

Jasper-Newton—Dr. D. McMicken, Kirbyville; 4th Wednesday quarterly.

Jefferson—Dr. B. P. Holland, Beaumont; 1st Monday monthly.

Nacogdoches—Dr. T. J. Blackwell, Nacogdoches; 2nd Wednesday monthly.

Orange—Dr. J. P. Hewson, Orange; 1st Tuesday monthly.

Polk—Dr. T. H. Bates, Camden; 1st Wednesday monthly.

Sabine—Dr. W. T. Arnold, Jr., Hemphill; 2nd Wednesday monthly.

Shelby—Dr. J. H. Windham, Shelbyville; 2nd Tuesday monthly.

EASTERN DISTRICT—No. 11.
Dr. C. C. Nash, Palestine, Councilor.

District Society—Dr. E. B. Parsons, Palestine, President; Dr. E. H. Vaughn, Tyler, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Anderson—Dr. E. B. Parsons, Palestine; 1st Monday monthly.

Angelina—Dr. J. C. Van Nuys, Lufkin; 1st Tuesday monthly.

Cherokee—Dr. T. H. Cobble, Rusk; 4th Tuesday monthly.

Freestone—Dr. E. V. Headlee, Teague; 1st Tuesday monthly.

Henderson—Dr. A. H. Easterling, Athens; 1st Mondays

Houston—Dr. W. W. Latham, Crockett; 2nd Tuesday monthly.

Leon—Dr. D. C. Carrington, Marquez; 1st Tuesday in April; 2nd Tuesday in October.

Panola—Dr. A. M. Baker, Carthage.

Rusk—Dr. W. P. White, Henderson; 2nd Tuesday quarterly.

Smith—Dr. Hubert Ferrell, Tyler; 2nd Tuesday monthly.

Trinity—Dr. W. H. Pope, Jr., Trinity; 3rd Thursday monthly.

The Angelina County Medical Society announces the following officers elected for 1916: President, Dr. T. A. Taylor, Lufkin; vice-president, Dr. W. W. Dunn, Lufkin; secretary-treasurer, Dr. J. C. Van Nuys, Lufkin; delegate, Dr. D. A. Mann, Diboll; alternate, Dr. B. F. Gibson, Lufkin; committee on legislation, Drs. J. W. Hawkins and D. M. Childers, Lufkin; censors, Drs. E. T. Clark, Keltys, J. H. Chapman and R. B. Bledsoe, Lufkin.

The Houston County Medical Society met in Crockett, January 11. Ten members and one visitor were present. The election of officers resulted as follows: President, Dr. W. C. Lipscomb, Crockett; vice-president, Dr. S. M. Briscoe, Lovelady; secretary-treasurer, Dr. W. W. Latham, Crockett; censors, Drs. C. C. Hill, L. Meriwether, and S. M. Briscoe; delegate, Dr. C. C. Hill; alternate, Dr. E. B. Stokes; legislation and public health committee, Drs. J. B. Smith, R. W. Skipper and L. Meriwether.

Dr. W. A. Davis, Austin, read an interesting paper on *The Necessity of Birth Registration and Its Benefits to the Child.* The paper was discussed freely.

CENTRAL DISTRICT—No. 12.
Dr. A. C. Scott, Temple, Councilor.

District Society—H. C. Black, President; Dr. H. F. Connally, Waco, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bosque—Dr. C. C. Cate, Morgan; 1st Wednesday

Bell—Dr. L. R. Talley, Temple; 1st Wednesday quarterly.

Comanche—Dr. Charles Ory, Comanche; 1st Thursday monthly.
Coryell—Dr. E. B. Baker, Gatesville; last Wednesday bi-monthly.
Erath—Dr. E. S. Winters, Dublin; 2nd Wednesday bi-monthly.
Falls—Dr. Aug. Streit. Marlin; 1st and 3rd Mondays.
Hamilton—Dr. J. B. Winn, Hamilton; 2nd Wednesday monthly.
Hill—Dr. J. E. Boyd, Hillsboro; 2nd Friday.
Hood-Somervell—Dr. G. D. Ross, Paluxy; Wednesday before the full moon.
Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.
Limestone—Dr. M. M. Brown, Mexia; 3rd Thursday bi-monthly.
Milam—Dr. D. E. Munroe, Cameron; 2nd Tuesday bi-monthly.
McLennan—Dr. C. E. Collins, Waco; 1st Tuesday.
Navarro—Dr. E. H. Newton, Corsicana; 1st Monday.
Robertson—Dr. A. J. Sharp, Franklin; 2nd Tuesday bi-monthly.

The Coryell County Medical Society announces the following officers for 1916: President, Dr. H. M. Haynes, Gatesville; vice-president, Dr. R. J. Brown, Gatesville; secretary-treasurer, Dr. E. B. Baker, Gatesville; committee on public health and legislation, Drs. D. C. Homan, Oglesby and R. Bailey, Gatesville; delegate, Dr. W. B. Newland, Gatesville; alternate, Dr. J. S. Wheeler, Coryell City; censors, Drs. T. M. Hall, Osage, W. B. Newland and M. W. Lowrey, Gatesville.

The time of meeting is the last Wednesday, bi-monthly.

The Erath County Medical Society met in Stephenville, December 22, 1915. Eight members were present. Officers for the year 1916, were elected as follows: President, Dr. A. O. Cragwell, Stephenville; vice-president, Dr. J. R. Sessums, Dublin; secretary-treasurer, Dr. E. S. Winters, Dublin.

The McLennan County Medical Society met at Waco, January 8. The following program was carried out: *Sewerage Disposal*, Dr. W. M. Brumby; *The Spread and Control of Typhoid Fever*, Dr. R. McCormack; *Public School Inspection*, Dr. J. R. Ferrell; *The Laboratory and Public Health*, Dr. C. E. Collins; *The Need of Co-operation of Public and Medical Men in Public Health Work*, Dr. M. D. Baker.

The Robertson County Medical Society announces the following officers elected for 1916: President, Dr. S. J. Alexander, Hearne; vice-president, Dr. F. R. Collard, Jr., Mumford; secretary-treasurer, Dr. A. J. Sharp, Franklin; censors, Drs. Steele, Gilson and Smith; delegate, Dr. J. C. Holman, Franklin; alternate, Dr. F. R. Collard, Jr. The society will meet quarterly during this year.

District Personals.—Dr. W. C. Tenery, Waxahachie, has just returned from New York, where he spent some time in the surgical clinics.

Dr. T. H. Cheatham, Waxahachie, recently had a narrow escape from colliding with a train while in his car.

Dr. C. E. Rayburn, who has just returned from a trip to New York, taking special work in eye, ear, nose and throat, has located in Waxahachie, and will be connected with Dr. Gough.

Dr. E. F. Gough, Waxahachie, will go to New York soon, where he will continue his studies on eye, ear, nose and throat, and also visit the surgical clinics.

Dr. G. P. Stoker, Red Oak, has retired from general practice and will move to Oklahoma and specialize in eye, ear, nose and throat work.

NORTHWESTERN DISTRICT—No. 13.
Dr. C. B. Williams, Mineral Wells, Councilor.

District Society—Dr. J. H. Eastland, Mineral Wells, President; Dr. R. A. Duncan, Graham, Secretary. Next meeting will be in Seymour, April 11-12, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Baylor—Dr. C. E. Johnson, Seymour; 2nd Tuesday.
Clay—Dr. Albert Greer, Henrietta; 2nd Wednesday.
Eastland—Dr. T. B. Busby, Rising Star; quarterly.
Parker-Palo Pinto—Dr. E. H. Bursey, Weatherford; 2nd Tuesday monthly.
Stephens—Dr. J. H. Ball, Crystal Falls; 1st Tuesday quarterly.
Throckmorton—Dr. D. C. Wylie, Throckmorton.
Young—Dr. W. H. Logan, Graham; 2nd Tuesday bi-monthly.

The Clay County Medical Society met December 28. The following officers were elected for 1916: President, Dr. J. A. Allison, Henrietta; vice-president, Dr. J. E. Moffett, Bluegrove; secretary-treasurer, Dr. Albert Greer, Henrietta; delegate, Dr. J. E. Moffett; alternate, Dr. R. E. Hilburn, Antelope. Dr. F. M. Patton, Shannon, was elected to membership.

NORTHERN DISTRICT—No. 14.
Dr. A. W. Carnes, Hutchins, Councilor.

District Society—Dr. C. R. Johnson, Gainesville, President; Dr. H. L. Moore, Dallas, Secretary.
Secretaries of Sections—Obstetrics and Gynecology, Dr. F. A. Pierce, Dallas; Medicine, Dr. J. D. Burt, Farmersville; Surgery, Dr. J R. Lewis, Gainesville.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Collin—Dr. E. L. Burton, McKinney; 2nd Tuesday.
Cooke—Dr. Julius McIver, Gainesville; 2nd Tuesday.
Dallas—Dr. R. S. Loving, Dallas; 2nd and 4th Thursdays.
Delta—Dr. C. C. Taylor, Cooper; 1st Monday.
Denton—Dr. W. G. Kimbrough, Denton; Tuesday following 1st Monday.
Ellis—Dr. E. F. Gough, Waxahachie; 2nd Tuesday.
Fannin—Dr E. H. H. Foster, Bonham; 2nd Thursday monthly.
Grayson—Dr. Davis Spangler, Sherman; 1st Tuesday.
Hopkins—Dr. T. K. Proctor, Sulphur Springs; 1st Wednesday.
Hunt—Dr. H. M. Bradford, Greenville; 2nd Tuesday.
Kaufman—Dr. B. J. Hubbard, Kaufman; 1st Tuesday, February, April, June, August, October and December.
Lamar—Dr. W. W. Fitzpatrick, Paris; 1st Thursday.
Montague—Dr. C. F. Young, Bowie; 2nd Tuesday monthly.
Tarrant—Dr. J. J. Richardson, Fort Worth; 1st and 3rd Fridays.
Van Zandt—Dr. D. L. Sanders, Wills Point; 1st Friday.
Wise—Dr. L. H. Reeves, Decatur; 3rd Tuesday each month.

The North Texas District Medical Association met in Fort Worth, December 7-8, 1915. Addresses of welcome were made by Mr. Altman, representing the Mayor and Dr. J. A. Gracey, President Tarrant County Medical Society, and were responded to by the President, Dr. R. W. Baird, Dallas.

The following program was rendered: Dr. I. C. Chase, Fort Worth, *The Examination of the Inguinal Canal in Appendicitis;* Dr. Will Cantrell, Greenville, *The Appendix Still an Issue;* Dr. F. C. Beall, Fort Worth, *The Treatment of Purulent Appendicitis;* Dr. Joe Becton, Greenville, *The Different Phases of Appendicitis and When to Operate.* These papers were discussed together, by Drs. Van Zandt, Gray, Parrish, Harris, Inge, Bond and Harper.

Dr. J. E. Gilcreest, Gainesville, read a paper on *Brain Injuries and Report of Case;* Dr. B. F. Largent, McKinney, *Injuries to the Lower Epiphysis of the Tibia*, which was discussed by Dr. Bond; Dr. C. H. Harris, Fort Worth, *A Few Suggestions for the Operative Treatment of Fractures*, which was discussed by Dr. E. L. Gilcreest; Dr. A. B. Small, Dallas, *Intestinal Tumors*, which was discussed by Drs. Rosser, Saunders and Harris; Dr. J. S. Davis, Dallas, *Conditions Due to Head Injuries of the New Born*, discussed by Drs. Carnes, Aynesworth and Blailock; Dr. A. I. Folsom, Dallas, *Seminal Vesiculotomy, Its Indications and Results;* Dr. Geo. D. Bond, Fort Worth, *Post-Operative X-ray in the Treatment of Cancer, of Equal Importance to the Operation;* Dr. J. M. Martin, Dallas, *Radiographic Diagnosis of Gastric Ulcer and Gastric Cancer, with Lantern Slides;* Dr. C. W. Simpson, Waxahachie,

Whooping Cough in the Public Schools, discussed by Drs. Aynesworth, Carnes, Smith, Keplinger, Blailock and Gilbert; Dr. John L. Davis, Waco, *Health Conservation After Forty*, which was discussed by Drs. Cantrell, Boyce, Baird, Harper and Parrish. Dr. C. L. Maxwell, Myra, *Report of a Case of Diphtheria;* Dr. M. L. Wilbanks, Greenville, *Diphtheria.* The latter two papers were discussed together by Drs. Van Zandt, Lain, Cantrell, Milliken, Warren, Keplinger, Moore and Gray.

Dr. S. A. Warren, Brookston, read a paper on *Puerperal Infection; Its Prevention and Treatment;* Dr. C. C. Parrish, Fort Worth, *Some Facts Bearing on the Cause of Pellagra.*

Dr. W. C. Calvert, Dallas, presented a case of acromegalia.

Dr. Elbert Dunlap, Dallas, read a paper on *Unsolved Gynecological Problems;* Dr. F. A. Pierce, Dallas, *Cystoscopic Examinations During Pregnancy*, which was discussed by Drs. Black and Harris; Dr. C. W. Flynn, Dallas, *Malpositions of the Uterus, Significance and Treatment*, which was discussed by Drs. Bourland, Van Zandt, Whidden, Cantrell, Carrol, Harris, Gilcreest, Talbot and Dunlap; Dr. R. C. Whidden, *Curettage of the Uterus*, which was discussed by Drs. Parrish, C. E. Cantrell, Gilcreest and Williams.

A motion was made and carried to make an assessment of $1.00 per capita on the members of the Association to relieve the depleted condition of the treasury.

The following officers were elected: President, Dr. C. R. Johnson, Gainesville; vice-president, Dr. C. O. Harper, Fort Worth; secretary, Dr. H. L. Moore, Dallas; Judicial Council, Drs. J. C. Loggins and D. M. Higgins. The following section appointments were made: Obstetrics and Gynecology—Drs. C. H. Harris, Fort Worth, chairman, and F. A. Pierce, Dallas, secretary; Medicine—Drs. M. L. Wilbanks, Greenville, chairman, and J. D. Burt, Farmersville, secretary; Surgery—Drs. B. F. Largent, McKinney, chairman, and J. R. Lewis, Gainesville, secretary. Greenville was selected as the next meeting place.

The Tarrant County Society entertained the Association with a theatre party at the Majestic, followed by a smoker at the Westbrook Hotel.

The Collin County Medical Society met at the residence of Dr. E. L. Burton, McKinney, January 11. The following members were present: Drs. W. A. Houser, Blue Ridge; G. T. Bates, Anna; E. L. Hailey, Celina; W. C. Wright, J. D. Burt, Rod Neathery, Farmersville; W. G. Harris, Plano; W. T. Largent, W. S. Wysong, D. F. Houston, Ben Largent, O. H. Kirkpatrick, J. C. Erwin, J. E. Gibson, E. L. Burton, M. S. Metz, J. W. Largent, J. E. Hunter, W. E. Rucker and Fitzhugh Wolford of McKinney. C. N. Abbott, State Senator Tom Perkins, F. C. Thompson. Drs. R. W. Baird, Dallas; A. W. Carnes, Hutchins; Frank D. Boyd, Fort Worth, were guests of the society.

The following program was carried out: *What Has Happened to My Hypertension Cases*, Dr. R. W. Baird, Dallas. Dr. Baird's lecture was illustrated with charts, showing blood pressure symptoms, and he gave accurate data, with report of 100 cases, of some of which a record had been kept for several years.

The subject was freely discussed by most of those present.

Dr. J. D. Burt of Farmersville, read a paper on *Pituitary Extract in Obstetrics.* He described the pitituary body, and told the use of pituitrin. He emphasized the importance of care in its administration, and said that smaller and repeated doses should be given to get its full physiological effect. It should always be given hyperdermically. When used in labor, caution should be observed to see that the os is well dilated, and it should be soft and yielding. He also thinks pituitrin a most useful remedy in post partum hemorrhage. The paper was discussed by Drs. Rucker, Wysong, B. L. Largent, W. T. Largent, J. W. Largent, Bates, Hunter and Houston, and was closed by Dr. Burt.

Dr. Frank D. Boyd of Fort Worth, was unanimously elected to honorary membership in the society.

Senator Tom W. Perkins of McKinney, made a short address. His stand for regular medicine, interest in public matters, and high regard for the profession, brought forth hearty applause.

A vote of thanks was extended Dr. and Mrs. Burton for hospitality extended. After all business, Mrs. Burton served to the entire society an eight course dinner.

The Cooke County Medical Society met in regular session December 14, 1915, at the home of Dr. T. C. Edwards. This being the annual meeting, the society proceeded with election of officers, the result of which is as follows: President, Dr. O. W. Cunningham, Valley View; vice-president, Dr. C. B. Thayer, Gainesville; secretary-treasurer, Dr. Julius McIver, Gainesville; censor, Dr. C. L. Maxwell, Myra; alternate, Dr. E. L. Gilcreest, Gainesville; program committee, Drs. E. L. Gilcreest, C. R. Johnson, C. F. Rice; public health committee, Drs. J. L. Dawson, D. M. Higgins and C. R. Johnson.

After election of officers, the society took up the question as to whether it would or would not join the Retail Merchants' Credit Association. Dr. Johnson made a report to the society for the credit association and after considerable discussion it was unanimously voted not to join. The President then asked the secretary to see all members of the society and ask if they would go into said credit association collectively and report at the next meeting.

Dr. E. L. Gilcreest suggested that the members make a donation for the community Christmas tree, and a collection of $10.50 was taken.

The Ellis County Medical Society met in Ennis, January 11. Fifteen members were present, Dr. C. E. Rayburn, Waxahachie, was elected to membership. A membership committee was appointed to try to get all eligible physicians in the county to become members in 1916.

The program was as follows: *Address by the President*, Dr. Z. N. Thornton, Forreston; *Some Eye Disturbances Due to Pelvic Reflexes*, Dr. E. F. Gough, Waxahachie, which was discussed by Dr. C. E. Gray, Ennis; *Brachycardia, Report of a Case*, Dr. A. L. Thomas, Ennis.

The Grayson County Medical Society met in Denison, January 3. Eight members and two visitors were present. The visitors were Dr. A. W. Carnes, Hutchins, Councilor and Dr. A. I. Folsom, Dallas.

Dr. W. C. Rutledge presented a little girl seven years old, who had an induration in the subcutaneous tissue and muscles of the face, neck and part of the thorax. Subjective symptoms absent. She was brought before the society for diagnosis and recommendation for treatment. The discussion resulted in two possible diagnoses, one myositis ossificans, the other, faulty function of ductless glands.

Dr. Folsom read a very interesting paper on *Seminal Vesiculotomy.* The paper was illustrated with lantern slides and gave a complete description of the operation. He discussed the danger of gonorrheal infections both acute and chronic, and laid stress upon the fact that 90 per cent of the cases of acute anterior urethritis involve the posteria urethra and that a large percentage of these cases involve the prostate and seminal vesicles.

The Hopkins County Medical Society met in regular monthly session in Sulphur Springs in December, with ten members and two visitors present. The weather was bitter cold, preventing some of the out-of-town doctors from attending.

The following papers were read, discussed and enjoyed by all present: *Pneumonia—Diagnosis of*, Dr. Frank Long; *Pneumonia—Its Treatment*, Dr. A. B. Worsham.

Six new members were received by application.

The Hopkins County Medical Society met in regular session in Sulphur Springs, January 5. There were eighteen members and visitors present. Dr. W. E. Connor, Cumby, read a paper on *The Use and Abuse of the Tonsil.* This paper was freely discussed by almost all the physicians present. A sumptuous banquet was served at the Garrison Hotel. Dr. W. W. Long was toastmaster. The following toasts were responded to: Dr. E. Sterling, *Our New Beginning;* Dr. W. E. Connor, *Something Needed;* Dr. J. J. Johnson, *Nothing New Under the Sun;* Dr. W. T. Binion, *The Country Doctor;* Dr. T. K. Proctor, *The Doctor Fifty Years Hence.*

The Hunt County Medical Society met January 11. The following members were present: Drs. C. L. Gregory, H. M. Bradford, A. S. McBride, C. E. Cantrell, D. R. Waddle, T. J. Milner, P. A. Peak, E. P. Becton, J. H. French and Jas. W. Ward, Greenville; A. B. Moore, Neyland; J. J. Coppedge, Lone Oak; C. G. Allen Campbell.

Dr. Ward read a paper on *Surgical Tonsils.* The paper was discussed by Drs. Waddle, Moore, Milner, Peak, Cantrell, Bradford. Dr. Ward closed the discussion.

Dr. E. P. Becton was elected censor for three years. The members of the Legislative and Public Policy Committee were appointed as follows: Drs. C. E. Cantrell, D. R. Waddle and J. J. Coppedge.

The Kaufman County Medical Society met in Terrell, February 1, in regular session, with 15 members and 2 visitors present. One of the visitors, Dr. E. T. Hardy, made application for membership. The weather was rather cold and raw but it had no effect on the interest produced and maintained throughout the day by the discussions elicited from cases reported.

Dr. D. H. Hudgins, Forney, reported a case of severe hemorrhage produced by an uterine fibroid polypus, which was cured by removal.

Dr. T. M. Jarmon, Terrell, reported a case of empyema in a child of 18 months, with ordinary signs and symptoms absent, and extraordinary symptoms present. He also reported a case of ruptured ectopic gestation 18 months ago, with right complete resection; the patient has since borne a well developed, healthy baby.

Dr. L. B. Sowell, Forney, reported a left ectopic gestation, operation successful. A year later was another in the right side in same patient; no operation and death.

Dr. W. F. Alexander, Terrell, reported a case of osteomyelitis in a girl of 14; *x*-ray picture showed the entire femur affected. The trouble began with pain in the knee, as if a synovitis.

Dr. R. E. Hearne, Mabank, reported a case of a crying babe in utero, testified to by Dr. B. C. Andrews, Mabank, as follows: Dr. Hearne was called to see a negro woman in labor. She had other children. Everything was found to be normal, presentation normal and labor progressing normally. The head soon passed through the straits and impinged on the perineum, but would not come lower. Two doses of pituitrin were given with no better results. After a sufficient wait, Dr. Andrews was called and the forceps used. The head was brought down until the perineum was dilated considerably, when the forceps slipped off and the head receded, out of sight, and while doing so the cries were heard. Digital examination was made and the head was found to have re-entered the womb, and a shoulder was presenting. Podalic version was made and delivery easily accomplished; and while delivering the after coming head, attempts at breathing were frequently noticed. The child appeared to be healthy and normal, but died at the end of 24 hours.

Dr. W. H. Neely of Terrell, made a talk on *Bright's Disease*, particularly that form which follows scarlatina, illustrating by reports of cases and presentation of urinary specimens. He reported the case of a woman, married 11 years, no children. The attack occurred Monday night with pain in the abdomen, nausea and vomiting, following a heavy supper. Freely purgation produced with no relief; the pain continued with soreness diffused all over the abdomen, but apparently higher on the right side; the pulse rate Tuesday was 90 to 96, no shock no rigidity. Wednesday night the symptoms were more pronounced. She had missed one menstrual period, and saw a stain at another, and there was some pallor. Exploratory incision Thursday, showed a ruptured ectopic pregnancy of the right side; the diagnosis had not been made but had been suspected.

Dr. S. M. Gladney, Terrell, reported an interesting case of a locomotive engineer, 58 years of age, with chronic arthritis and arteriosclerosis.

Dr. Jarmon reported a case of bowel occlusion of gradual appearance. Incision had revealed a mesenteric tumor impinging on the colon at the splenic flexure, believed to be carcinomatous. It was removed. Nodules were seen on the transverse colon but condition of the patient prevented further manipulation. Another operation followed, in which the entire colon was removed and the ileum attached to the sigmoid flexure. Results good.

The next meeting will be held in Terrell, April 4.

The Tarrant County Medical Society held its first meeting of the new year in the form of a banquet, at the Westbrook Hotel, January 7. The first meeting of the year has become, by general consent, a get-together meeting. The new President, Dr. C. O. Harper, made a very appropriate talk and stated that the object of the meeting was to discuss *The Relation of the Medical Department of the Texas Christian University to the Tarrant County Medical Society.* The following spoke on different phases of the subject: Drs. W. A. Duringer, Bacon Saunders, S. A. Woodward, W. G. Cook, F. D. Boyd, K. H. Beall, Holman Taylor, C. H. Harris, Mr. J. B. Hawley, Prof. Cockrell, Drs. F. G. Sanders, T. C. Terrell, C. H. McCollum, J. H. McLean, I. C. Chase and J. E. Robinson, Temple. The trend of the discussion was that the medical college was worthy of support by the profession and that its success would redound to the benefit of the people and profession of the county in many ways.

The Tarrant County Medical Society met in Fort Worth, January 21, with 40 members and 1 visitor, Dr. Wilder of Glen Rose, present. The following new members were elected: Drs. Fred Horn, Will Horn, Clark Arnold, G. O. Shirey, J. H. Sewell, G. W. Day and J. C. Alexander.

A patient was shown by Dr. R. H. Gough, a small boy who had been shot in the eye with an air-gun, January 1. The shot did not go into the chambers of the eye, but the force of the bullet ruptured the iris, leaving it sagging. The case was discussed by Drs. Head, Thompson and Harris. While the eye had seemed to improve some the general opinion was that the child would lose the sight.

Dr. C. O. Harper showed an unusual and inter-

esting case of multiple adenitis, involving all the cervical and axillary glands. A complete and well-prepared history, together with laboratory and *x*-ray findings, were given. Dr. Bacon Saunders was of the opinion that the condition was lympho-sarcoma, or possibly due to local infection in the mouth or throat. Drs. Harris, McCollum, McLean, Head, Coffey, Harris, Head and Wilmer Allison, also discussed the case.

THE WISE COUNTY MEDICAL SOCIETY met at Decatur, December 7, 1915, with the following members present: Drs. C. J. Parris, J. J. Ingram, B. M. Jones, P. J. Fullingim, S. J. Petty, J. A. Embry and L. H. Reeves. Dr. J. P. French, Greenwood, was elected to membership. Luncheon was served at the International Hotel by the local members.

The following officers were elected for the ensuing year: President, Dr. B. M. Jones, Rhome; vice-president, Dr. C. J. Parris, Greenwood; secretary-treasurer, Dr. L. H. Reeves, Decatur; delegate, Dr. S. J. Petty, Decatur; alternate, Dr. P. J. Fullingim, Decatur; censor, Dr. J. A. Embry, Decatur, Drs. Ingram and Buckner holding over for one and two years, respectively; Committee on Public Health and Legislation, Drs. Fullingim, J. H. Walker, Alvord and B. E. Braselton, Bridgeport.

After dispensing with the regular business, some interesting cases were reported, and talks along the line of organized medicine were made by nearly every one present.

DISTRICT PERSONALS.—Dr. C. J. Parris of Greenwood, has moved to Decatur and formed a partnership with Dr. J. J. Ingram.

Dr. J. P. French, Jr. of Fort Worth, has recently located at Greenwood.

Dr. J. H. Walker of Alvord, is in Arkansas on a business and pleasure trip.

Dr. R. T. Foster of Boonsville, has recently moved to West Texas to practice his profession.

Dr. and Mrs. J. J. Richardson, Fort Worth, announce the birth of a son, January 29.

NORTHEASTERN DISTRICT—No. 15.

Dr. W. H. Blythe, Mt. Pleasant, Councilor.

District Society—Dr. R. Y. Lacy, Pittsburg, President; Dr. J. N. White, Texarkana, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bowie—Dr. E. M. Watts, Texarkana; 4th Friday.
Camp—Dr. R. Y. Lacy, Pittsburg; 1st Wednesday.
Cass—Dr. J. W. Shaddix, Marietta; 1st Wednesday.
Franklin—Dr. Z. C. Fuquay, Mount Vernon; 1st Tuesday.
Gregg—Dr. W. D. Northcutt, Secretary.
Harrison—Dr. J. B. Baldwin, Marshall; 1st Tuesday.
Marion—Dr. S. A. Miller, Jefferson; 1st Thursday monthly.
Morris—Dr. R. C. Farrier, Omaha; 1st Tuesday quarterly.
Titus—Dr. W. H. Blythe, Mount Pleasant; 2nd Tuesday.
Upshur—Dr. B. W. Wood, Gilmer; 2nd Tuesday.
Wood—Dr. V. E. Robbins, Quitman; last Friday monthly.

THE BOWIE COUNTY MEDICAL SOCIETY met in regular session January 28, with the following members present: Drs. R. H. T. Mann, L. H. Lanier, L. J. Kosminisky, T. E. Fuller, T. F. Kittrell, R. L. Grant, S. A. Collom, J. N. White, E. M. Watts of Texarkana. Dr. M. A. Bizzell, recently moved to Texarkana, was a visitor.

A committee was appointed to draft resolutions in regard to the deaths of Dr. C. A. Smith and the little son of Dr. B. C. Middleton.

Dr. R. L. Grant read a paper on *Gall-Stones*, which was freely discussed. In the absence of the essayist, Dr. B. E. Dixon. Dr. E. L. Beck presented his paper, *Report of a Case of Ileus in a Child*, and also, *Report of a Case of Pyo-Salpinyx in a Small Girl*. Both of these unusual reports received liberal discussion.

THE CASS COUNTY MEDICAL SOCIETY met in Linden, December 1. There were twelve members present. Dr. W. H. Haines, Naples, was elected to membership. The following officers were elected for 1916: President, Dr. W. W. Halbert, Hughes Springs; vice-president, Dr. T. G. Howe, Douglasville; secretary-treasurer, Dr. J. W. Shaddix, Marietta; delegate, Dr. W. H. Haines, Naples; alternate, Dr. T. G. Howe; censors, Drs. T. G. Howe, A. E. Starnes and J. W. Shaddix; committee on public health and legislation, Drs. C. E. Davis, J. H. Herndon and H. L. D. Jenkins. A paper on *Septic Infection (Puerperal)*, was discussed by all present.

THE MARION COUNTY MEDICAL SOCIETY met at Jefferson, December 31, 1915. The following members were present: Drs. R. L. Armistead, J. A. R. Moseley, J. N. McCasland, S. A. Miller and J. P. Chambers. Drs. Clifford McCasland of Lasater, and John I. Norris of Jefferson, were elected to membership. The following officers were elected: President, Dr. J. P. Chambers, Jefferson; vice-president, Dr. Clifford McCasland, Lasater; secretary-treasurer, Dr. S. A. Miller (re-elected), Jefferson; censors, Drs. J. A. R. Moseley, J. N. McCasland, R. L. Armistead and I. W. Lake; delegate, Dr. S. A. Miller; alternate, Dr. J. A. R. Moseley.

THE TITUS COUNTY MEDICAL SOCIETY met January 11, at Mount Pleasant. Members present were, Drs. W. R. K. Johnson, S. C. Broadstreet, S. R. Crabtree, T. M. Fleming, T. S. Grissom and W. H. Blythe. Dr. T. K. Proctor, Sulphur Springs, was a visitor. He made a few remarks on the County Medical Society, and read a paper entitled *The Diagnostic Significance of the Presence of Pus in the Different Regions of the Nasal Cavities*. He was given a vote of thanks for his paper. The Zetetic Committee rendered its report and was discharged.

A committee consisting of Drs. Fleming, Grissom and Broadstreet was appointed to formulate an amendment to the By-Laws of the Titus County Medical Society, such as will require a better attendance, and, provide for the expulsion of a member for non-attendance.

THE UPSHUR COUNTY MEDICAL SOCIETY met in Gilmer, January 13th and the following officers were elected: President, Dr. M. B. Richards, Ashland; vice-president, Dr. H. C. Wilson, Gilmer; secretary-treasurer, Dr. B. W. Wood, Gilmer; delegate, Dr. T. S. Ragland, Gilmer.

The monthly meeting date was set for the second Thursday in each month.

DISTRICT PERSONAL.—Dr. H. H. Merrill, Texarkana, has been appointed chief surgeon of the Cotton Belt Railroad, succeeding the late Dr. C. A. Smith.

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

W. H. HARGIS, President.....San Antonio.
W. H. BLYTHE, Vice-President.....Mt. Pleasant.
H. L. WILDER, Secretary-Treasurer.....Glen Rose.

CHANGES OF ADDRESS.

Dr. F. N. Haggard, from Palestine to San Antonio.
Dr. Geo. Holmes, from Leesville to Gonzales.
Dr. E. F. Stroud, from Waxahachie to Tulsa, Okla.
Dr. J. F. Gibson, from Marshall to Paris.
Dr. L. B. Stevens, from Bookston to Paris.
Dr. Uel Keith, from Stephenville to Clareville.
Dr. J. T. Risinger, from Hylton to Buffalo Gap.
Dr. H. M. Duke, from LaFayette to Winnsboro.
Dr. W. M. Thomas, from Mineral Wells to Fort Worth.
Dr. M. E. Curtis, from New Waverly to Huntsville.
Dr. J. A. Wall, from San Marcos to San Antonio.
Dr. C. W. Stevenson, from Houston to Loraine.
Dr. G. P. Stoker, from Red Oak to Mt. Pleasant.

WHAT SHOULD APPEAR IN THE MINUTES.*

BY

R. S. LOVING, M. D.,

DALLAS, TEXAS.

My mission in appearing before this body is to seek intelligence rather than impart it. My experience of three years as a county society secretary has not yet taught me how to decide definitely what should appear in the minutes. I shall take it as a very great favor if your discussion of this subject is thorough.

Should the minutes contain a complete account of the members and visitors present at the meeting or should such a list be kept in a separate place in the book?

Should the reports of cases be written up in the form of brief synopses, or only mentioned by title, with the name of the members reporting?

Should the essays be sketched in brief, or only mentioned by caption, and reporting the name of the author?

These questions will perhaps be viewed from different angles, depending upon the size of the society, whether or not its proceedings are published in a *Bulletin* and whether or not reports are made to the State Secretary.

Perhaps the society may become a trifle bored at hearing the case reports and essays of the last meeting rehashed in the reading of the minutes. The society may feel that the time occupied by such reading could be spent more profitably on new business. If these reports and essays appear in detail in the *Bulletin* the members have the opportunity of reviewing them, including those who were absent.

When we send in the report of a meeting to the State Secretary, for publication in the JOURNAL, should that report be a copy of the minutes or more complete? Should the report mention only the caption of the article and the author, or should it give a synopsis? Are those who address a meeting pleased to read an outline of their remarks or would they prefer a mere mention? Could the STATE JOURNAL afford space for epitomized reports of cases, essays and discussions for all of the county societies?

I see in the JOURNAL that Harris county is given considerable space for detailed reports. Very few others are written up in this manner. I would be glad to know which is preferable.

Occasionally an unpleasant situation arises in the society. An application for membership is reported unfavorably by the Board of Censors and rejected by a vote of the society. Should it appear in the minutes; if so how much of it and should it be published in the *Bulletin* and the STATE JOURNAL?

In my experience, a rejected candidate for membership once asked to see the minutes of the meeting in which he was re'ected, noting the list of those present and the count of the votes cast. He maintained the position that the minutes should be made to show exactly why the report of the Board of Censors was unfavorable and why he was rejected. He had friends in the society who sustained him. Were they right or wrong? At another time, charges were preferred against a member. He was tried and censured. The proceedings were recorded in the minutes and the minutes published in the *Bulletin*. A copy was sent the STATE JOURNAL but failed to appear. The secretary (that means me) was most severely criticised by some of the members and also by the Councilor of the District. When referring to the family skeleton must we put on the soft, soft pedal? Furthermore, at a subsequent meeting, the censure was changed to an exhonoration and then, after having frowned upon publicity, the demand was made that the same space be given to the alteration as was formerly given the first judgment. What strange things do we learn in the school for scandal!

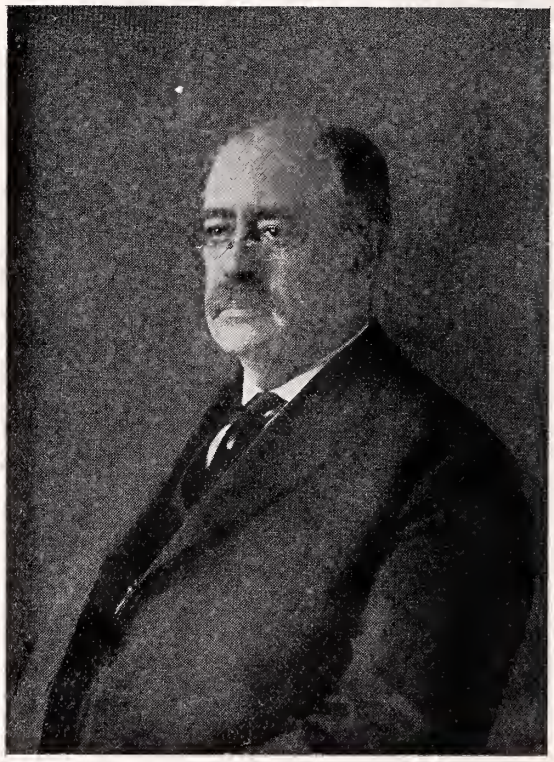
Why cannot a county secretary be honest and fearless in the discharge of his duty? The "mantle of charity" is a beautiful sentiment but "minutes is minutes" and integral parts of the archives of the society. Of what value as permanent records are minutes which have been expunged of important transactions, in order that some one may have removed from his fair (?) escutcheon the pitch with which he contaminated himself?

*Read before the State Association County Secretaries, Fort Worth, May 6, 1915.

DEATHS

DR. CHARLES ADNA SMITH of Texarkana, died at the Cotton Belt Hospital in that city, January 12, following an illness of several months duration.

Dr. Smith was born in Granville, New York, October 1, 1856. He was the second son of Henry James Smith and Olivia Cordele White. His early education was obtained at Castleton Seminary, New York, and the Michigan State Agricultural College, following which schooling, he attended the University of Michigan at Ann Arbor, for four years, graduating at the expiration of that time. His degree in medicine was secured from Rush Medical College, Chicago, in 1880. Following his graduation in medicine, he practiced for a year or more in Gladwin County, Michigan, from which place he went to St. Louis, entering the Hospital Service of the Missouri Pacific Railway System at that place, under Dr. W. B. Outten, then Chief Surgeon. He has remained in this service through his professional life, at various times being located at Sedalia, Mo., Marshall, Fort Worth, Palestine, Tyler and Tex-



DR. CHARLES ADNA SMITH.

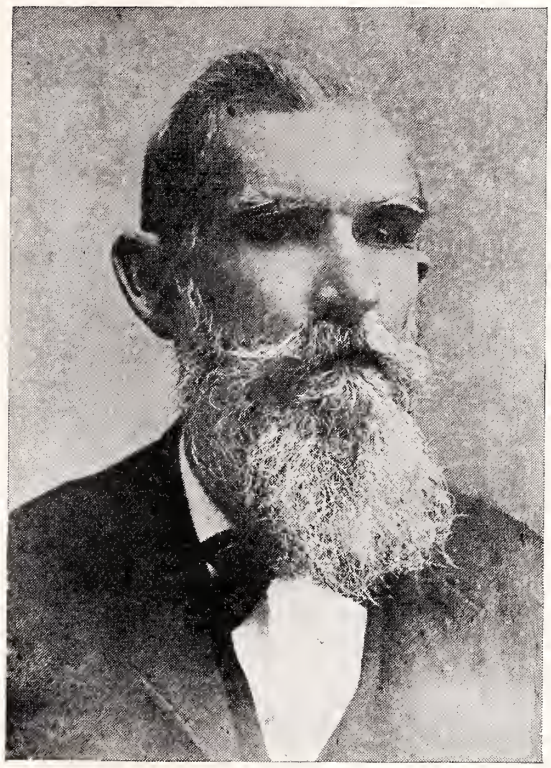
arkana, Texas. He became Chief Surgeon of the Southwestern Railway (Cotton Belt) in 1887, which appointment was given him by Col. S. W. Fordyce. He built the company hospital in Tyler, and remained in that city for many years. In 1904 he established for the road, the large Central Hospital at Texarkana, to which place he removed with his family as soon as the hospital was in operation. Dr. Smith was married in Tyler, February 16, 1893, to Miss Elizabeth Bonner, daughter of the late Judge M. H. Bonner of the Supreme Court of Texas. He is survived by his wife, one son Charles Adna, Jr., and two daughters, Olivia and Marjorie.

Dr. Smith was an active citizen in every respect, and numbered his friends by the hundreds, both in and out of the profession. While residing in Tyler, he was president of the school board for many years, and was always prominent in the management of city affairs. He was a Mason, Knight of Pythias and an Elk. He was a member of St. James Episcopal Church, Texarkana. His activity in scientific circles was equalled only by his love for his fellow physicians. He was an active member of many medical organizations, beginning with his county society and culminating in the American Medical Association. He was a member of a number of special societies, and a Fellow of the American College of Surgeons. He was treasurer of the State Medical Association of Texas from 1907 to 1913, relinquishing the office at that time, in order that he might give more of his attention to the scientific work of the Association, from which he had because of his official connection for a number of years, been somewhat excluded. His last most notable service was as Chairman of the special committee on the study of Pellagra, making his report at Fort Worth last year. His method of making this report was quite characteristic of the man. Each member of the the committee was invited to deal with a special phase of the situation, and to present his own ideas, uninfluenced by the chairman or the other members of the committee, to the Association on his own account. Dr. Smith was a modest, cultured, educated and lovable man, and it would be quite out of the question to undertake to give expression to the regard in which he was held by his fellows, within the limits of this occasion.

Dr. Jesse B. Burditt of Houston, died at his home, January 24, 1916, presumably from some form of heart disease. He was found dead in his room. Dr. Burditt was born in Caldwell County, Texas, in 1871, and received his early education in the public schools of Lockhart. He received his degree in medicine from Tulane University in 1894, and has practiced in Bellville, Brenham and Houston, to which later place he removoed some six years ago. He had for some time limited his practice to diseases of the eye, ear, nose and throat, and was on the staffs of the Baptist Sanitarium, the Sunset Hospitals and the M. K. & T. Railway.

Dr. Burditt was a member of his county medical society, the State Medical Association, the Southern Medical Association, and the American Medical Association, and was noted for his devotion to the cause of medical organization. He was an Elk and a Mason, and claimed a host of friends in every walk of life. He was a man of sterling character, undoubted honesty, and was loved by all who knew him. He leaves a mother, one sister and four brothers. His heirs have arranged to devote his entire equipment to the establishment of an eye, ear, nose and throat clinic, to be known as the Burditt Memorial Clinic, and attached to the Baptist Sanitarium of Houston. His funeral was conducted by the Masonic Lodge, and a special car of friends accompanied the remains to his old home at Lockhart.

Dr. Abraham Jefferson Still died at his home in Kemp, Texas, January 15, 1916, at the advanced age of more than 86 years. Dr. Still was born at Bachelor's Hill, Tenn., July 30, 1829. Left without parents when a lad of 14, he secured such literary education as the neighborhood schools afforded. Being influenced in his choice of callings by the fact that a number of his kinsmen were physicians, he began the study of medicine under his uncle, Dr. Isaac Still, at Marion, Arkansas, when but nineteen. Subsequently he attended lectures at the Memphis Hospital Medical College, graduating in 1858. He immediately opened an office and began practice among the people of the place of his birth. His practice was extensive in those early days. He served the Confederacy during the War between the States, as an assistant surgeon under Dr. Westmoreland, at Columbus, Miss., until failing health caused him to return to his home. In 1868, he moved to Palestine, Texas, and engaged in the practice of medicine and the drug business for two years, at which time he sold out and went to Kaufman County, where he took up his practice again, and again entering the mercantile business. He continued to practice until 1889, when, because of poor health and his infirmities, he retired.



Dr. Abraham Jefferson Still.

He was married to Miss Margaret B. Graves, at Decaturville, Tenn., November 17, 1859. She died 18 years ago. To them were born 6 sons and 2 daughters, all of whom were at his bedside when the summons came. The six sons were the active pall bearers. He was a member of the Baptist church for more than 50 years, and was an uncompromising southern democrat, and though at the time disfranchised, made his influence felt in ridding his adopted State of carpet bag rule. He was a member of the first Medical Society ever organized in Kaufman County, and ever was a strong believer in organized medicine.

Dr. G. F. Thornhill of Paris, died December 6, 1915, while returning home from a call. He was born in 1859 in Washington County, not far from the old historic town of Washington, once the capital of Texas. Early in life he was thrown upon his own resources. He obtained his education from a college in Indianapolis, Indiana. He first entered commercial life, and from time to time held several positions of trust, during the last four years of which time he took up the study of Homeopathy and graduated from the Hering Medical College of Chicago, in 1898. He was a member of the old State Board of Homeopathic Medical Examiners, which position he held for a number of years. He was vice-president of the State Homeopathic Medical Association at the time of his death. He practiced in Fort Worth for a time, removing to Paris in 1900. He leaves a widow, two daughters and a son, the latter a student in the University of Virginia.

Dr. Thornhill was a consistent member of the Methodist Church, and a Mason in its truest meaning. His ideals of life were high, and he was always ready to help the needy, speaking encouraging words to those who were not so fortunate in life as he was, and lending his life and influence wherever he could do good.

Dr. Forrest Bedford Smith, Houston, died December 1, 1915. He was the son of James L. and Julia C. Smith, and was born August 25, 1868, at Salado, Texas. He attended school at the Salado College until June, 1887, then took a course in pharmacy and engaged in the drug business two years at Salado. He later attended the Sam Houston Normal Institute, at Huntsville and graduated in June, 1892. He taught school in Bell county, for two years following his graduation, and then was County Superintendent of Public Schools of Bell county for the next two years. He attended the Medical Department of the State University, Galveston, one year, 1896-1897, and then entered the University of Pennsylvania, graduating in 1900. He began the practice of medicine in Houston in the summer of 1900, where he remained until his death. He was a Baptist and was prominent in fraternal circles, being affiliated with the Masonic orders, Woodmen of the World, and Maccabees. He was a member of his county, State and National medical organizations. He married Miss Loula Allen, June 3, 1908, who, with a daughter, aged 6, survives him. He is also survived by his mother and three brothers.

Dr. John McDuff of Jourdantown, died from exposure, January 7, 1916. He left home in the performance of his duties as county health officer and became lost in the pasture of Mr. Walter Dorsey, where his body was found.

Dr. McDuff was born in Jackson County, Alabama, August 16, 1865. His parents moved to Cass county, Texas, in 1874. He obtained his education from the common schools of Cass County and finished his medical course at the age of 20 years, with an M. D., degree from the Memphis Hospital Medical College of Memphis, Tennessee. He afterwards located in his home county, where he practiced for eight years, then at Bloomberg, then at Atlanta and some time later moved to Jourdantown, Texas, at which place he was practicing when he died.

Dr. McDuff was married to Miss Madina Fetts in 1894. He was a member of the Cumberland Presbyterian Church, a member of Atascosa County Medical Society and consequently of the State Medical Association of Texas. Surviving him are his wife, two children, Estell and John M. Jr., mother and father, two sisters and one brother, Dr. D. R. McDuff of Berclair, Texas.

Dr. J. A. Jones, D'Hanis, Texas, died at his home from the effects of a gunshot wound, December 16, 1915. He was 49 years old, a graduate of the Louisville Medical College, Louisville, Kentucky, in the class of 1890. He was a member of the Medina County Medical Society, the State Medical Association and the American Medical Association. He had practiced medicine in Medina County for the past three years, having practiced before that time in Oak Cliff, Dallas, Texas.

BOOK NOTES

International Clinics. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other Topics of Interest to Students and Practitioners. By Leading Members of the Medical Profession Throughout the World. Edited by Henry W. Cattell, A. M., M. D., Philadelphia. Four Volumes annually, 8vo., cloth. J. B. Lippincott Company, Philadelphia and London. $2.00 per volume.

Volume I contains articles of value on Diagnosis and Treatment, Medicine, Surgery, Medical Problems, and the Progress of Medicine during the year 1914. The text is aptly illustrated with colored plates, black and white plates, cuts and diagrams. There is a paper by Osler, on The Diagnosis of Polycystic Kidney, and another by Dr. Arthur F. Holding, Electrologist to the Cornell Cancer Research Hospitals, on The Treatment of Malignant Tumors with Electrical Methods. There are 21 well written articles by men af acknowledged ability, and the last a summary of medical progress to the date of issue.

Volume II embraces new material on Diagnosis and Treatment, Pediatrics, Medicine and Surgery. It is illustrated with four colored plates, and numerous black and white plates, figures, diagrams and charts. Of note is an excellent article on Cerebrospinal Fluid in Diagnosis, by Charles Clyde Butler of the Pathological Laboratory of the Rochester General Hospital; another of merit on Human Conservation, A Neglected Field for Medical Specialization, by J. Madison Taylor, and a report of the Orthopedic Clinic of Fred H. Albee at the New York Post-Graduate Medical School, by Dr. P. G. Skillern, Jr., M. D.

Volume III is filled with good papers on Diagnosis and Treatment, Pediatrics, Borderland Medicine and Surgery. Among the good papers in this volume is one by Arthur Newlin, M. D., Notes on Some Unusual Causes of Abdominal Pain. Dr. Irving David Steinhart has contributed an article on the Ideal Physician as the Citizen Builder; and The Defects of Our Public Insane Hospital Systems have been clearly shown in an article by Dr. Edward Huntigton Williams.

Volume IV closes the Twenty-Fifth Series with papers on The Coming of Age of Internal Medicine in America. by Osler, and The Centenary Volume of The "Clinics," by Henry W. Cattell, M. D., a series of papers on Diagnosis and Treatment, Pediatrics, Neurology, Obstetrics, Surgery, Gynecology, and the Alvarenga Prize Essay on the subject. The Surgery of the Pancreas. The illustrations consist of five colored plates, and scores of black and white plates, figures, diagram and charts. The first volume of the Clinics was published in April, 1891,

by J. B. Lippincott Company. It was planned by Dr. W. W. Bulette, and edited by Drs. Keating and Griffith of Philadelphia, and Bruce and Finlay of London. Among its first contributors were Weir Mitchel, Ferrier, H. C. Wood, Goodell, Finlayson and Keen, with others of note in the history of medicine.

INJURIES TO THE EYES, NOSE, THROAT AND EARS. By Andrew Maitland Mamsay, M. D., F. R. F. P. S. (Glasgow); Ophthalmic Surgeon, Royal Infirmary, Glasgow; Major R. A. M. C. (T. F.), J. Dundas Grant, M. D., F. R. C. S. (Eng.), late Major R. A. M. C. (T. F.), Etc., H. Lawson Whale, M. D., (Camb.) F. R. C. S. (Eng.) and Charles Ernest West, F. R. C. S. (Eng.), Aural Surgeon, Etc. Pp. 160, cloth, 12mo., War Primer, uniform with set. Oxford Press, American Branch, 35 West 32nd Street, New York. 1915. $1.00.

As its name would indicate, this is a small, first aid book, dealing with injuries while in active service upon the battle field. In all, this Primer contains one hundred and sixty pages, 4½x6½ inches, with large, clear type and well written text.

Injuries to the eye are discussed in this small volume in seven short articles or chapters: Penetrating Wounds; Contusion of Concussion Injuries; Wounds Complicated by the Presence of a Foreign Body in the Eyeball; Burns and Explosion Injuries; Sympathetic Ophthalmia; Amblyopia Due to Traumatic Neurosis, and Ocular Signs and Symptoms Accompanying Head Injuries. The author states briefly what the emergency and after treatment should be in all of the above mentioned conditions, making a very acceptable and valuable ready reference book on the subjects treated.

The sections on Injuries to the Nose, Throat and Ear, is handled in the same concise and practical manner as is the section on the Eye, with the addition of case reports, which serve to illustrate the authors' technique. On page 83 of this little book, the Authors refer to one of our own eminent writers, Dr. Joseph C. Beck of Chicago, who has contributed to the literature af plastic surgery of the nose.

DISEASES OF THE SKIN. By Henry H. Hazen, A. B., M. D., Professor of Dematology in the Medical Department of Georgetown University; Professor of Dermatology in the Medical Department of Howard University; Sometime Assistant in Dermatology in the Johns Hopkins University; Member of the American Dermatological Association. 8vo., cloth, Pp. 539, nonpareil, leaded. 233 illustrations, including 4 in colors. C. V. Mosby Company, St. Louis. 1915.

Professor Hazen, in the preface to his work, tries to apologize for having written the book at all; then he points out the very best of reasons for its publication., *i. e.*, that there is no work available to the American student, that fills the place it will occupy. Other books are either too voluminous, or are mere compends and of little use to the student and general practician. Dr. T. Caspar Gilchrist of Baltimore, writing the introduction, says, "It affords me much pleasure to write an introduction to Dr. Hazen's text-book on dermatology." He further informs us that the author took his degree at Johns Hopkins, spent two post-graduate years as assistant to the chair of Dermatology, in that institution, did some research work on his own hook while there and published a number of valuable articles relating to his work. The author is commended as an experienced, painstaking, thorough, diagnostitician, of a critical, judicial mind, of proper age, with sufficient experience and capacity to write a good textbook on dermatology, which is a good deal to say of one's former student.

The book is divided into 34 chapters, and is well illustrated, the pictures showing graphically the normal cutaneous tissues and lesions of the pathological conditions discussed in the text, which, in turn, is well written, and clear.

The publishers have done their usual good work in the manufacture of this volume, and the subscriber will not be disappointed in its value, either in mechanical art or literary make up.

THE PRACTICAL MEDICINE SERIES. Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the General Editorial Charge of Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University Medical School. Series of 1915. The Year Book Publishers, 327 LaSalle Street, Chicago.

VOLUME IX, SKIN AND VENEREAL DISEASES. By Oliver S. Ormsby, M. D., Professor and Head of the Department of Skin and Venereal Diseases, Rush Medical College; and MISCELLANEOUS TOPICS, by Harold N. Moyer, M. D., 12mo., cloth, 240 pages, illustrated. $1.35.

The introduction, written by Dr. Ormsby, says, "A review of the literature on cutaneous medicine shows very little diminution in its volume, owing to the activities of the war. Syphilis and the venereal diseases have been well studied in the armies in the field, and emergency treatment has been devised, while prophylactic measures have been given trial on a large scale. Attention has been called to the possible spread of leprosy due to contact of soldiers in the fields where it is endemic. Trench fighting, under the conditions during cold weather, has produced numerous cases of erythema and gangrene of the feet, similar to frost-bite, due in these instances to temperature above the freezing point."

Speaking of the systematic study of the Wassermann reaction in this country, and the favorable reports reassuring its value, he says, "This important reaction, on account of conflicting reports from different laboratories, was beginning to be discredited to some extent, but an analysis of the reports show that the test itself is still valuable; the requirement necessary to place it in an unassailable position is standardization of technique." And he is of opinion that "Many reports of cholesterinized antigens appear to demonstrate their utility when properly controlled. They are especially valuable in regulating treatment."

139 pages are devoted to the diagnosis and treatment of the dermatoses; 15 pages to gonorrhoea, 74 pages to syphilis. and 23 pages to miscellaneous subjects, such as Feminism; Medical Education; The Value of Preliminary Education; Primitive Medicine; The Dublin Medical and Physical Essays, Etc.

VOLUME X. NERVOUS AND MENTAL DISEASES, ($1.35), is edited by Hugh T. Patrick, M. D. and closes the Series of 1915. Of diseases of the nervous system, the neuroses, the cerebrospinal fluid and diseases of the meninges, diseases of the brain, diseases of the spinal cord, diseases of the sympathetic and spinal ganglia, diseases of peripheral nerves are noticed. Of mental diseases, mental defects and delinquency, insanity and the war, dementia praecox and maniacal insanity, are given consideration.

MICROBES AND MEN: Tomorrow's Topics Series. By Robert T. Morris, M. D. Illustrated, small 8vo. Cloth. 539 pages. Doubleday Page & Company, Garden City and New York. 1915. Net, $2.00.

Dr. Morris is at once a genius, a pessimist and a realist. Sometimes, as we read his trite sayings,

we say "optimistic!" Again, we are saying, "cynical!" But always he is revolutionary. He revolts at the tardiness of the profession; at the tardiness of society. He hates its conventions, and would bide only its widest freedom from all that binds and handicaps in achieving the highest perfection. He hates to be called philosophic; and maybe he isn't philosophic. He hits everything but himself. He dreams visions, and revels in them, at times. A thinker he is, in ethereal terms. Good natured, piquant, but not acidulated. Hyperpsychic, if you will, and sentient beyond common mortals. His book, Microbes and Men, is simply superb, and one reads it like a boy drinks red lemonade at the old county fair. It leads one about the circle of life's ever changing perspective, pointing out aspects, perspectives, and *raison d'etre*. The book is splendid, indescribable and elusive.

A Surgeon's Philosophy is the work of an agnostic idealist, floundering in the twilight realms of dreamy doubt. The author says, "The conception of a personal God is constructively fanciful. God is a practical working model of nature, placed in the minds of different races of men in order to spare them the trouble of trying to comprehend the whole subject of Nature. Nature placed the idea of a personal God in the mind of man as a working library of herself in a compact edition." And this is "A Surgeon's Philosophy!" God was a very "personal" being with Job: "He frustrateth the devises of the crafty, so that their hands cannot perform their enterprise. He taketh the wise in their own craftiness: And the counsel of the forward is carried headlong. They meet with darkness in the daytime, and grope at noonday as in the night." We prefer the faith of our fathers.

Again he says, "As a medical student I was surrounded by others who found in their dissections anything but suggestions of the soul.' Well, "Life and Thought had gone away," but did you find no suggestions of the Creator's design and masterwork in the complex, delicate, and wonderful mechanism which it was necessary for you to dissect that you might get some knowledge of its structure, to enable you to treat its living organs? If not, we do indeed marvel that you could write at all. Of course, every physician of liberal education could well afford to read this book.

The Doctor Versus Folks is the third volume in the set. The author says in this book, "One of my acquaintances said that he had given up medical writing because he always stepped on some one's toes when writing an article for publication. My reply was that he was a pale, feeble coward—that his business was not only to step on toes, but to jump on them with both heels. Personally, I have always been grateful when men jumped on my toes, because it forced me into a belligerent mood, and before the melee was over we all got more or less light upon the points at issue." Never did uninspired, mortal write more truly the living truth. And that atones for all there is to irritate in "A Surgeon's Philosophy." The man who throws down the gauntlet to the critic, on any line, and can profit from the fray, is the man who can tell us what we should be told, *vive voce* or by letter, and men will hear and heed.

Fee Splitting is one of the subjects of the author's scathing and earnest invectives. He calls attention to the abuse of surgery by incompetent men, who are allowed to pass State Boards without being forced to attain a standard of competency compatible with the safety of his victims and urges that the State standardize the qualifications for surgical licensure. The text is replete with diatribe, pathos irony and humor. It is rich in the sympathies of being, poignant in the arraignment of empirics, quacks, and charlatans, and liberal toward every honest effort, lauding whatever is right, and scathing all that is wrong. The entire book is elevating and is worthy of more than one reading.

Medical and Veterinary Entomology. A Text-Book for Use in Schools and Colleges, as well as a Handbook for the Use of Physicians, Veterinarians and Public Health Officials. By William B. Herms, Associate Professor of Parasitology in the University of California; Parasitologist to the California State Board of Health, and Formerly Professor of Zoology in the San Francisco Veterinary College; Author of "Malaria, Cause and Control," Etc. The MacMillan Company, New York. 1915. $4.00.

The author of this book has excelled the writers preceding him in this field. The book is valuable to the whole medical profession, showing, for the first time, to our knowledge, how and why some of the most dreaded diseases are peculiar to both man and beast, and why others are peculiar to one but not to the other. It has brought into the "lime light" the science of medical entomology, in a well systematized and orderly arranged text, clear, and precise of diction, which to the veterinarian is of first importance, and which to the physician and scientist will prove both an aid and an attraction. Its emphasis is strong on the fact that the majority of destructive animal paresites, especially the more deadly, and those even threatening, at times, the whole human race, find as their only refuge the domestic animals as hosts and carriers. It is full of the practical matter of interest in daily life of both the physician and the veterinarian, as, for instance, the discussion of the tick (*Bo-ophilus annulatus*), the spreader of *Babesia bigemina*, the cause of Texas cattle fever. The subject is of the greatest importance at this time, when a vigorous campaign is on for the extermination of this host, perhaps the greatest economical handicap for the commerce of the state, costing the Southern United States according to statistics for the year 1906, $130,500,000, in deaths of cattle, imported pure breds, loss of weight in tick infested cattle, lowered prices, sterility in high grade cattle, expensive federal quarantines for protecting the North, discouragement of breeders of pure bred cattle in the South, and loss in crops, from lack of fertility of lands due to lack of diversification. It is claimed that with the eradication of the tick the agriculturists would soon take to a wide crop diversification throughout the South, enriching the land and the population. This remarkable volume is both timely and fortunate.

BOOKS RECEIVED.

Report of Medico-Military Aspects of the European War. *Surg. Fauntleroy, U. S. A.*

Practical Medicine Series:

Nervous and Mental Diseases. *Patrick-Bassoe* Vol. X. 1915.

Skin and Venereal Diseases. *Ormsby-Moyer.* Vol. IX, 1915.

Alcohol Hygiene and Legislation. *Williams.* (Goodhue Co.)

Medical Clinics of Chicago, January, 1916. (*W. B. Saunders Co.*)

Painless Childbirth, Eutocia and Nitrous Oxid-Oxygen Analgesia. *Davis.* (Forbes & Co.)

Surgical Operations with Local Anesthesia, 2nd Ed. *Hertzler.* (Surgery Publishing Co.)

Hygiene and Sanitation. *Egbert.* (Lea & Febiger.)

The Treatment of Acute Infectious Diseases. *Meara.* (MacMillan).

Principles and Practice of Medicine. *Edwards.* (Lea & Febiger).

Texas State Journal of Medicine

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Contributions to the JOURNAL *must* be typewritten, on one side of the paper only, doubled spaced and with ample margin. This for facility in editing and to obviate error.

VOL. XI. MARCH, 1916 No. 11

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

THE PROBLEM OF PYORRHOEA ALVEOLARIS.

Until recently pyorrhoea alveolaris was strictly a problem of the dentist, just as formerly tonsilitis was almost exclusively a subject for the consideration of the limited practitioner. The relationship of the infected tonsil to many systemic diseases, formerly of unknown and unsuspected etiology, has been clearly established, and a new field of much interest has been for some time open to the medical profession. Not until recently, however, has the parallelism between infected teeth and infected tonsils become so obvious. Hartzell and Henrici,[1] have recently shown, experimentally and clinically, the relationship of dental abscesses and pyorrhoea alveolaris, to lesions in the heart, kidney, joints and elsewhere. This is not at all strange when we consider that the mouth is likely to become at any time the host of almost any type of bacterial growth. While most of these are temporary inhabitants, there are certain of them which may be classed as permanent, and which have become variously a subject for consideration at the hands of dental and medical investigators.

Notwithstanding the amount of knowledge recently compiled on the subject, pyorrhoea is as yet a disease of unknown and extremely uncertain etiology. The dentists have for a long time considered it a disease mainly of streptococcic infection, and have been treating it locally, for the most part. Recently, Bass and Johns,[2] and Smith and Barrett,[3] independently, suggested that the entameba buccalis was the cause of the disease, and since that announcement many encouraging reports of the use of emetin as a specific in the disease have been published. The more or less constant existence in the mouth of ameba, has been recognized for many years, but no pathologic significance has heretofore been attached to the circumstance. Sanford and New,[4] following the work of Sellards and Baetjer,[5] in amebic dysentery, recently attempted to produce amebic dysentery in kittens by the injection of entameba buccalis directly into the intestinal canal. Their efforts were unsuccessful, and at the same time two control kittens injected with entameba histolytica developed typical amebic dysentery, with demonstrable organisms. The same efforts were made with guinea pigs, which are highly susceptible to amebic infection. They conclude that there is no clinical parallelism between the presence of entameba buccalis in the mouth and entameba histolytica in the intestinal canal.

Price[6] is strongly of the opinion that when the true etiology of pyorrhoea is understood, some of the microorganisms of the mouth which do not grow on artificial media, and which for that reason are as yet slightly understood, will be found to play a much more important role in this disease than do entamebae. He thinks he has already found such an organism, one which he can readily recognize, which refuses to grow in artificial media which does not contain blood, preferably blood from the patient from whom it was obtained, and which

1. Hartzell, T. B. and Henrici, A. T.: *Surg. Gynecol. and Obs.* January, 1916, p. 18.

2. Bass, C. C. and Johns, F. M.: Alveolodental Pyorrhoea. Philadelphia, 1915.

3. Smith, A. J. and Barrett, M. J.: *Jour. Parasitol.* I, p. 159, 1915.

4. Sanford, A. H. and New, G. B.: *Surg., Gynecol. and Obs.*, January, 1916, p. 27.

5. Sellards, A. W. and Baetjer, W. W.: *Bull. Johns Hopkins Hosp.*, February, 1915.

6. Price, W. A.: *Surg., Gynecol. and Obs.*, January, 1915, p. 37.

is killed by the blood of others, and of certain animals. He thinks that the presence in the mouth of some irritating substance, whether a deposit of tartar, an ill fitting crown or filling, a mass of food, or a mass of bacterial detrius, will prove sufficient to call out from the tissues the elements of the blood stream necessary for developing the peculiar appetite of this particular microorganism. He continues:

"The removal of the irritant immediately robs them of the intermediate means for providing this special food. There is indication that the progress of this disease toward the tooth apex is related to these chains or threads of epithelial cells which exist in the pericemental tissue. After they, with their symbionts, have destroyed the pericemental tissue, opening up the minute alveoli or bone-cells of the alveolar bone, the latter become ideal fields for streptococcal infections, which are planted directly from the mouth. In these protected areas of varied oxygen tension, the various strains of streptococci are developed, which select out with great regularity certain tissues of the body which they reach through the blood stream and which they infect by embolic process. We see no more reason based on the evidence already submitted for claiming that endamoebae are the chief etiological factors in pyorrheas than for blaming it upon any one of several other mouth microorganisms which like the endamoeba buccalis, will not grow on any artificial media that we yet know of and which organisms are as constantly present in the pyorrhoea pockets as are this protozoan. It is our belief that not until we know very much more of these, but little understood organisms will we have solved the problem as to what the real etiology of pyorrhoea alveolaris is."

Ruoff,[7] found that of 190 patients examined at the Fort Stanton Sanatorium for Tuberculosis, 187 showed the endameba. Practically all of them had a pyorrheal tendency, but of the 78 treated only 64 had one or more of the clinical symptoms, such as pockets, pus, loose teeth, receding gums and bleeding gums, of which the latter was the most frequent symptom. None of those treated lost their endameba permanently. The condition of the gums and teeth was greatly improved in 3 cases, moderately improved in 9 cases, slightly improved in 22 cases, and stationary in 41 cases; the results were doubtful in 2 cases, and 1 case became worse. It would frequently happen that patients would be found negative for endameba at the conclusion of treatment, but practically all of them were positive again in from two to four months, in spite of an ipecac mouth wash. His conclusion as to treatment is that while emetin is an amebicide, it alone will not cure pyorrhoea alveolaris. These patients were tuberculous and consequently in a more or less depleted state.

Hartzell and Henrici,[8] calls attention to some very important points as to the avenue of infection in this disease:

"The mucous membrane is designed to protect the tissues, blood stream and lymphatics from infection. The union of the mucous membrane to tooth structure is always, after the eruption of a tooth, imperfect and capable of admitting infection. It is a notable fact that the dental structure has no protecting device, save its coat of enamel. If this be in any way imperfect there seems to be no antibodies or protecting leucocytes in the saliva to save it from the disintegrating effect of bacterial action. Unless aid be given by thorough cleansing of tooth surfaces, the integrity of the tooth is sooner or later destroyed by acid-forming microorganisms which make its surface their home and later enter into its structure.

* * * "Our next point of interest, therefore, is the gingival crevice or gum marginal crevice, in total length about thirty inches, protected externally by a tough pavement epithelial protection at its point of union with the tooth structure.

* * * "This process is in the majority of individuals greatly aided by the formation of calculus on the root surfaces or at the gingival margin. When once an organism enters the tissue at this point its future progress into the tissues is hastened by the vast power of mastication, the sum of masticatory pressures amounting to about one ton per day in the average individual. The masticatory force depresses the tooth in its joint or socket and the elasticity of the tissues causes rebound when the power of occlusion is released. The tooth, therefore, plays the part of a piston during mastication with the average movement of a sixtieth of an inch. It cannot be doubted that this movement aids in ingress of organisms to the underlying tissues through the unprotected areas of the gum crevice. The masses of bacteria growing on the tooth's surface and in the gingival crevice, even if they do not always gain access to the tissues in the way just described, produce enzymes and irritating toxins, which inflame the gum margin, resulting in oedema and further favoring bacterial development in this thin wedge of tissue. This brings about, as a rule, destruction of the few cells lining the crevice, causing ulceration, paving a way presently to pyorrhoea and providing the potential for peridental inflammations such as abscess, etc.

* * * "If pyorrhoea obtains for some time, say long enough to produce an average depth of ulcer-

7. Ruoff, J. S.: *Pub. Health Reports*, January 21, 1916, p. 108.

8. Hartzell, T. B. and Henrici, A. T.: *Surg., Gynecol. and Obs.*, January, 1916, p. 18.

ating surface of a quarter of an inch about each of the teeth, we then have an ulcerating surface of seven and one-half square inches. If the average depth of pocket was only one-eighth of an inch, we have an ulcer equivalent to three and one-fourth square inches. Compare this ulcerating surface infected with all sorts of organisms to the greatest possibility of the tonsils with eight to sixteen cryps in each, and you have some idea of the relative importance of the dental tract in the planting of general infection."

Perhaps not sufficient differentiation is made between pyorrhoea and deep seated alveolar infection. Rhein[9] considers this aspect of the question, and concludes that many cases of alveolar abscess are erroneously diagnosed as pyorrhoea alveolaris, and urges that the *x*-ray be utilized more frequently in determining exactly the extent of pathology in these cases. He states that it has been found that the toxemia resulting from a dental granuloma is far greater than from pyorrhoeal discharge. He deplores the fact that the dental student is grossly ignorant of everything pertaining to the body outside of the dental organ, and that the medical student is taught the anatomy, histology, physiology and pathology of every part of the body except what may be termed the dental organ. The importance of this portal of entrance to the digestive tact is too often overlooked, and not until stomatologists are developed who are endowed with thorough medical education, will much advancement be made in this important subject.

Undoubtedly, there is much yet to be learned about this disease, and it would seem now to be a problem in which dentists and physicians must unite their energies, both in the matter of investigation and treatment. The *x*-ray must show the extent of the pathology in a large proportion of cases, and it will probably take the combined efforts of the dentist and surgeon to remove all of the pathology. It is also quite likely that the internist will be needed in a large proportion of cases, both as to investigation and treatment, not only because the disease has become systemic, but because it may have in the first instance been based on physical depletion.

9. Rhein, M. L.: *Surg., Gynecol. and Obs.*, January, 1916, p. 33.

Annual Session, May 9-10-11

COMMITTEE ON FIRST AID.

Upon the request of the First Aid Conference, President Dr. Moody has appointed a Committee on First Aid, as follows: Dr. R. W. Knox, Houston, Chairman; Drs. Bacon Saunders, Fort Worth, and R. L. Ramey, El Paso. Other members may be added later, but these will conduct the work of the committee for the present.

The First Aid Conference, it seems, had its origin in a meeting of railroad surgeons, principally ehief surgeons; general officials of railroads, chiefly from the claim departments; representatives from the medical departments of the Army and Navy, from the Public Health Service and the National Red Cross Society; a few civil surgeons representing national surgical associations, and representatives of manufacturers of first aid supplies. This Conference met in August of last year, and their deliberations covered a wide range, as indicated by the name of the organization. So far as we know, this is the first effort that has ever been made to get the consensus of opinion of the surgeons and physicians of the country, who have to do with first aid, on any single subject, and it will be interesting to watch the outcome.

The importance of the movement may be judged by the fact that the President of the United States, in response to resolutions adopted by the Conference, has appointed a Board of Standardization, comprised of the following eminent physicians:

Dr. Richard H. Harte, chairman, representing the American Surgical Association, 1503 Spruce street, Philadelphia, Pa.; Assistant Surgeon-General W. C. Rucker, secretary, representing the Public Health Service, Washington, D. C.; Dr. J. Shelton Horsley, representing the American Medical Association, Richmond, Va.; Dr. John P. Kaster, representing the Association of Railroad Chief Surgeons, chief surgeon, Atchison, Topeka & Santa Fe Railroad, Topeka, Kan.; Dr. S. C. Plummer, representing the American Association of Railroad Surgeons, chief surgeon, Chicago, Rock Island & Pacific Railway, Chicago, Ill.; Major Robert U. Patterson, representing the United States Army Medical Corps and the American Red Cross, Department of First Aid, Red Cross, Washington, D. C.; Col. Louis A. La Garde, U. S. A., retired, representing the War Department, Washington, D. C.; Surgeon A. M. Fauntleroy, representing the Navy Department, Washington, D. C.

This Board is to deliberate carefully on first aid methods, packages, equipment and instruct-

ions, and recommend a standard for each to a subsequent session of the Conference. The following questions have been sent to all members of the Association of Railroad Chief Surgeons of America, a few civil and military surgeons, and others presumed to be interested in the subject, and they will indicate quite clearly what line the inquiry is at present taking:

1. What has been your experience with the most available first-aid package and dressing for small and large wounds?
2. What has been your experience with the immediate employment of antiseptics in accidental wounds; what antiseptic have you used, in what strength, and how applied? Have you employed tincture of iodine; if so, how and what have been the results?
3. What in your experience has been the most efficient and most readily applied method of fixation for injuries of the (a) upper and (b) the lower extremity?
4. Have you considered the construction of a stretcher, which, in addition to serving as a means of transportation of injured, will have appliances for the fixation of the upper and lower extremity, somewhat along the lines of a Bradford splint, or the Gihon naval splint?
5. Please state your views on some liquid ointment dressing which would be available for first-aid in large wounds and burns with the object of preventing the usual dry-gauze dressing adhering to the wound and rendering subsequent dressings painless.

Dr. Joseph C. Bloodgood, 904 North Charles Street, Baltimore, Md., is Secretary of the Conference, and to him all letters and inquiries should be directed.

The principal National and State medical societies have been invited to appoint special first aid committees of three members each, to co-operate with the Board of Standardization, and quite a number of them have already done so. The committee here appointed will place Texas in line with the other enterprising organizations, and the personnel of our committee will insure good work from our section of the country. Any of the committee will be pleased to hear from any member of the Association who is interested in this subject, or who has had any experience that may prove elucidative even to a minor degree. It is useless to discuss the great good that may come of this effort to gain the consensus of opinion of the leading minds in surgery and medicine of this country, particularly those who have every day experience in this very important class of work. Not the least important result to be expected, is that standardization of equipment and effort will materially reduce the expense of caring for accidental injuries, which will allow more funds to be devoted to prophylaxis and general welfare work.

THE AMERICAN RED CROSS.

The American Red Cross is the humanitarian arm of the United States Government; the only volunteer relief organization recognized and in part controlled by the government. It is essentially a reserve, emergency organization, seeking to supplant no other organization engaged in humanitarian and welfare work, and offering assistance to all of them. Its principal function is to fill the breach made in the routine of every day affairs by some great disaster, of which war is perhaps the greatest and most impending. The organization had its inception in the International Conference of Geneva, held in 1863, and its prime purpose was to provide co-operation in time of war with the medical service of armies. Subsequent conventions of this character have given definite status to the organization and the various governments have made of it a semi-official body. To its purpose as a relief agency in time of war, has been added the responsibility of caring for disasters on a large scale, and at such a time when all other agencies are rendered inoperative.

The American National Red Cross was incorporated by an act of Congress in 1905, and since that time it has been under government supervision. President Wilson is president of the organization and the governing board is appointed by him. Its finances are audited by the War Department. In time of war it is the only organization that can go to the front and assist the regular medical service of armies. For this purpose, there is a special Military Relief Department, under the command at the present time of Col. Jefferson R. Kean, Medical Corps, United States Army, and plans have long since been perfected for the organization of relief columns and complete units, ready for service at a moments notice. The Civil Relief Department is in like manner ready to organize units for special purposes, immediately upon any call. Altogether, the American Red Cross has engaged in more than 80 relief operations,

since 1905, covering disasters from earthquakes, volcanic eruptions, fires, floods, famines and explosions and wars in foreign countries. In round numbers, $14,500,000 have been expended for this purpose in this length of time.

The American Red Cross is only that portion of the greater Red Cross incorporated in our own country. Japan with a population of 40,000,000 has 1,800,000 Red Cross members; Germany with a population of 67,000,000 has 1,000,000 members, and the United States with a population of 100,000,000 has only 33,000 members. This much in comparison, and in order to emphasize the necessity of arousing the humanitarian and patriotic instincts of our people in the interest of this great organization. A campaign at the present time is under way to increase the membership in this country, and chapters are now being organized throughout our own State. The cost of membership is small, $1.00 per year, with the usual provisions for special contributing memberships, and for this amount each member gets a badge and a splendid monthly magazine. There is no obligation incident to membership, other than to support in this manner the good work of the organization, and perhaps serve on special committees. Physicians and nurses are enrolled with the national body, and all expeditions are sent out from national headquarters. Chapters do not undertake relief work, except following directions from headquarters. The organization is non-sectarian and non-political, and there is no reason why the warmest advocate of peace, even peace at any price, should not joins hands with the advocates of preparedness and shoulder to shoulder strive for the good of humanity. As usual, the medical profession is assuming its full share of the burdens of humanity, and is even taking the lead in the organization of Red Cross Chapters throughout the State. We heartily commend the objects and aims of the organization, and hope eventually to see the membership in America exceed that of any other country.

Conditions in Mexico are such as to lead us strongly to anticipate an emergency requiring the services of the Red Cross, and doubtless when it comes those States bordering the trouble zone will be called upon to lead in the work. It is well to be prepared.

THE RED CROSS EMBLEM PROTECTED BY LAW.

Section 4 of the act incorporating the American National Red Cross, prohibits any person within the jurisdiction of the United States from representing himself to be a member or agent of the organization, for the purpose of collecting and soliciting funds or material, or wearing or displaying the sign of the Red Cross as an advertisement or to induce the sale of any article whatsoever, or for any business or charitable purposes within the territory of the United States and its possessions. Persons, corporations and associations actually using the emblem prior to the passage of the act, are, of course, exempt, as are employees and agents of the army and navy sanitary and hospital authorities. It will be recalled by many that the Ameriean Medical Association at the time of passage of this act, used as its insignia a red cross on a blue field and that the Association voluntarily relinquished the use of same as conflicting with at least the spirit of the occasion which brought about the enactment of this law. There are doubtless many organizations and commercial enterprises, including physicians, today using this emblem that are prohibited by this law from doing so, and their attention should be called to the matter. The use of the emblem by the National Association for the Study and Prevention of Tuberculosis in the Christmas seal fight against that dread disease, is authorized, and no other organization has the right to use the red cross in this connection. The advantage, of controlling this use of the emblem may be readily understood when we are told that the aggregate sales of Red Cross Christmas Seals since 1908 and including 1914, have amounted to $2,320,000. The emblem is an advertising asset of no small value, and it must for that reason be carefully guarded, that imposition be not worked upon the charitably disposed and kind hearted citizen.

A RESERVE SURGICAL CORPS FOR THE ARMY.

The present medical service of the army will hardly more than care for peace needs, much less for the requirements of warfare. A reserve medical corps has been established, very wisely so, and from time to time we learn of some

physician in civil practice being ordered to some remote section of the country to take his place in the army, temporarily or permanently, according to circumstances. A rather severe test is accorded those who would serve either in the regular corps or in the reserve corps, and the age limit for the former is so low that usually those who could secure appointment are academically rather than practically informed. Other opportunities being equal, the more skillful will hardly consent to quit civil practice for a service which is comparatively lacking in remuneration. Very naturally, in times of national stress the patriotism of a large proportion of the great men of medicine will urge them to service, but under those circumstances they are so lacking in knowledge and conception of military requirements that their great skill can hardly overcome the handicap.

The Red Cross service opens up a way for a second reserve force, but as at present constituted their organization is rather indefinite. Dr. W. H. Snyder, in the February number of *The Ohio State Medical Journal,* outlines a very attractive plans for a reserve surgical corps which is designed to care for a number of deficiencies in the present system. He plans for cities of 100,000 population, reserve surgical units, comprising internists, surgeons, regional surgeons, assistants, anesthetists, radiographers, pathologists, pharmacists, nurses, orderlies, chauffeurs, etc., in such proportion that the units may be at any time divided equally, so that each unit is in fact two units, for purposes hereafter to be noted. Such units would be prepared to care for any medical or surgical situation that might arise, and the private equipment of each physician and nurse would be available for instant service, which is an item in time of warfare, as we may well believe, judging from the scarcity even now, in a country at peace with the world, of ordinary medical and surgical supplies for civil practice. A unit could comprise a portion of the staff of every established hospital in the city, and ample means provided for giving instructions in military surgery and medicine. Once thoroughly drilled the unit could add to itself at will, and at a moment's notice. The civil practice of each member of the unit would go on as before, and would be disturbed only by the approach of actual armed conflict. At such a time, the government could call on the nearest units for service at designated points. Each unit could divide itself immediately, sending half to the front, the other half remaining to take care of the personal civil practice of the whole. Thus the emergency would be cared for, and without greatly interrupting the requirements of civil practice. Of course, the units would serve in conjunction with and under the direction of the regular medical corps of the army. At suitable times, the divided unit could exchange places, and the entire unit could be called upon in case of great emergency, and for temporary service. In this manner, the author of the plan believes the army could secure the services of those successful practitioners who could otherwise perhaps not be induced, except in the face of dire necessity, to enter even the reserve medical corps. Thus, also, the political appointee would be in the minority, and skill would be the prevaling influence in the matter of selection. The plan would be particularly attractive in cities containing medical colleges, as there would be a surplus of under-graduates who would be willing to take minor positions with the unit, and who would be of inestimable service. Incidentally, many of the students, and some of the younger physicians of the unit, might eventually conclude to offer their services to the army permanently, thereby insuring a fruitful recruiting ground where at times there is a dearth of suitable material.

LIMITING THE COST OF ANNUAL SESSION ENTERTAINMENT.

For some years thoughtful members of the Association have been striving to hit upon some plan that would insure those who seek to entertain us during our annual sessions, against the extravagance of enthusiasm. It is easy to perceive that those in charge of each succeeding entertainment are unselfishly and hospitably striving to outdo the preceding hosts. This leads inevitably to perhaps delightful but at the same time unnecessary and wasteful expenditure of funds, and lays an ever increasing burden on those who would entertain us in the future. There are, in fact, but few communities in the State with hotel accommodations sufficient to care for the usual large attend-

ance on our annual sessions, and the frequent return of the privilege of entertaining the Association will eventually prove burdensome to the profession of such communities.

Various plans for relieving the situation have been advanced, notably that of charging a registration fee, the fund thus raised to be used to partly defray the expense of entertainment. This plan is open to many objections, the principal one of which is that the profession is not yet ready to embrace it. It is not the amount of the registration fee that would be considered, but the fact of the assessment, instead. We are essentially a hospitable people, and we are not in the habit of purchasing entertainment of this character. There would inevitably be criticism, and it is feared a loss of attendance, a very necessary feature of a successful session. It has been proposed to place a limit by resolution or amendment to the by-laws, to the amount of funds to be expended in entertainment, but it is incompatible with our ideas of hospitality and good fellowship to at the same time accept an invitation and place limitations on the entertainer. Already it has been ruled that no entertainment shall interfere with the scientific work of the session, and as the scientific work of the session consumes practically all of the time, there would seem to be little room for extravagant entertainment. It is extremely doubtful whether by regulation we could control the expenditure of funds that belong to the other fellow. Even the proposition of placing the entire entertainment in the hands of the Association, all expenses to be paid from association funds, has been considered, only to be thrown aside because of the serious drain this would prove to be on our funds. There would be no feasible way of controlling expenditures of this character, which would result in a situation not at all compatible with good management.

President Moody has been recently giving this matter considerable study, and he is convinced that the only solution of the problem is to earnestly urge that the entertainment be held within bounds, relying on the patriotism and common sense of our host to control the situation. He has personally urged the Galveston County Medical Society to take the lead, pointing to the previously wonderful entertainment accorded the Association and the state-wide reputation of the medical profession of the city and county of Galveston for unbounded hospitality, as their protection against any possible suspicion that they are inclined to be "short." After all, it is hospitality that is most desirable, and as a matter of fact, there is little opportunity for more than a single reception, aside from the entertainment of the visiting ladies, which need not be expensive.

We are not at all certain as to the outcome of the endeavor to control the entertainment during the next annual session, because we have already had some intimation as to the program, but we are hopeful that some effort will be made to standardize and establish a helpful precedent. We believe we can assure the Galveston County Medical Society that the profession of this State will be pleased to visit them and partake of their hospitality on a very moderate scale, relying for entertainment largely upon good fellowship, beauty of locality and our own devices.

THE OBLIGATION OF THE PROSPECTIVE CONTRIBUTOR TO THE SCIENTIFIC PROGRAM.

The honor of a place on the scientific program of our annual session is not generally appreciated at its full worth. The program represents a contract between the contributor and the visitor to the annual session, with the Association and the section officers as intermediaries. A member has a right to expect to participate in the reading and discussion of any given paper on the program at the time and place stated. He has a right to expect that any paper thus accorded a place on the program shall be original, in the sense that it shall not have been published, either in pamphlet form, in a "bulletin" or elsewhere, and he has the right, under our rules, to expect ultimately to see these papers in the JOURNAL, and to thus have them for a permanent record. Together these contributions make the medical history of the time. In short, there are definite laws covering the subject, familiarity with which should be the first purpose of any prospective contributor.

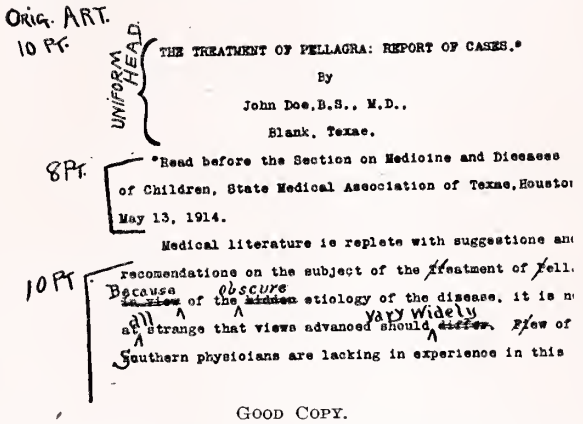
To be brief, every paper announced is already the property of the Association, and should be delivered at the time and place agreed upon, to the secretary of the proper section.

It is understood that no paper offered has before been published, and that no paper thus offered will be published elsewhere, except upon permission of the publication committee of the Board of Trustees, represented by the State Secretary.

Except through special agreement with the Chairman of the section, no paper will greatly exceed 2,000 words.

All papers must be typewritten, on one side of the sheet only, with double space between the lines, and with ample margin. All papers, except those contributed by invited guests, shall have been first read before county societies.

While conditions are progressively growing better in this respect, contributors are still too prone to forget that there are other obligations


ORIG. ART.
10 PT.
UNIFORM HEAD
THE TREATMENT OF PELLAGRA: REPORT OF CASES.*
By
John Doe, B.S., M.D.,
Blank, Texas.
8PT.
*Read before the Section on Medicine and Diseases of Children, State Medical Association of Texas, Houston May 13, 1914.
10 PT
Medical literature is replete with suggestions and recomendations on the subject of the treatment of pell.
Because obscure of the hidden etiology of the disease, it is n
all vary widely
at strange that views advanced should differ. View of
Southern physicians are lacking in experience in this

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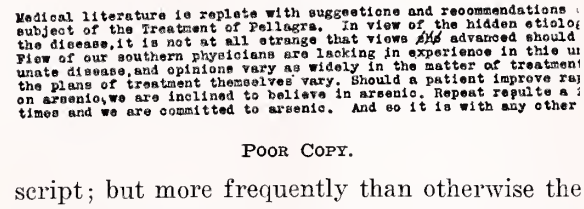
than the simple requirement that a paper be promised, perhaps prepared, and read at the time and place scheduled, if convenient. Nearly everybody now has access to a typewriter, and it is rarely ever that a paper is submitted in


The Treatment of Pellagra With Report of Cases.

Medical literature is replete with suggestions and recommendations subject of the Treatment of Pellagra. In view of the hidden etiolo the disease, it is not at all strange that views advanced should View of our southern physicians are lacking in experience in this u unate disease, and opinions vary as widely in the matter of treatmen the plans of treatment themselves vary. Should a patient improve ra on arsenic, we are inclined to believe in arsenic. Repeat results a times and we are committed to arsenic. And so it is with any other

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script; but more frequently than otherwise the author has given very careless reading to his manuscript, and stenographers are for the most part rather poor spellers when it comes to technical words and expressions. The failure to provide space between lines and ample margins, works a hardship on the editor of the JOURNAL when it comes to the matter of publication, because of editorial requirements. Incidentally, it is an extremely difficult matter to present acceptably a single spaced, full page manuscript, which is a matter of some concern both to the author and his auditors. Some typists have an idea that their work is not complete except they permanently bind it with manuscript covers, not knowing that before publication the pages have to be torn apart for the convenience of the printer. Sheets should be bradded together firmly, but in such manner that they can be easily separated. In short, a little care on the part of the author will save a great deal of trouble, and give his paper a much better opportunity for making a good impression.

The accompanying cuts, reproduced from the February, 1914, JOURNAL will illustrate nicely some of the points involved in the preparation of a manuscript for publication.

Very few readers will notice a long, drawn out and rambling discussion of any subject, no matter how interesting; the attractive article is brief, concise and to the point, written with a due regard for all of the necessary words, and the ordinary rules of grammar and construction.

ANNUAL REPORTS.

Annual reports are coming in with a fair degree of rapidity. Up to March 1, 1,118 members had received their blue membership card, and there is no question as to the protection, in the matter of medical defense, of at least this number. As will be noted, this is practically one-third of our membership. We desire to point out that there is but one month left in which county societies may file their annual reports and thereby remain in good standing. Any member of the Association who has not already paid his county secretary the amount of his dues for the current year, stands suspended without further to do. Any member thus suspended who chooses to do so, may be placed in good standing as from the first of January, by paying his dues in time for the secretary to remit the per capita assessment to the State Secretary, not later than March 31st. Otherwise the suspension becomes an established fact, and any member so suspended will loose the benefit of medical defense from January 1st. until the date upon which he actually pays his dues. We presume frequently to repeat this warning, because we deem it important, in view of the multiplicity of threatened malpractice suits against our members.

ORIGINAL ARTICLES

THE NEPHRITIS PROBLEM IN MEDICINE AND LIFE INSURANCE.*

BY

L. SEXTON, B. S., M. D.,

NEW ORLEANS, LA.

Nephritis advances in proportion to our civilization. It is a toxic condition accompanying mental strain, sedentary habits, over-eating and drinking. The great increase in the disease is made evident when we examine the statistics of registration cities, which show that kidney diseases have increased 75 per cent in twenty-five years, and 40 per cent within the last ten years. The extraordinary high mental and physical pressure under which the average business man and woman are working at the present time, in conjunction with high living and drinking, and the late hours kept by many of our society and bibulous people have increased kidney diseases in the past quarter of a century 75 per cent. It is time for the medical profession to sound a note of warning against some of the conditions which are partly responsible for this great mortality from kidney diseases.

Perhaps the greatest loss to life insurance companies and to the community at large, comes through death by the trinity of cardio-vascular-renal diseases. The following increase in mortality has been noted in the past few years in the most prominent registration cities: In New Orleans, 60; Memphis, 65; Richmond, 106; New York, 132, and Charleston, 356, per thousand, causing one-twelfth of all the deaths in the last named city. Nearly one-fourth of the deaths in Galveston last year were from cardio-renal disease. Nephritis is equally or more prevalent in the northern cities, where more meat and whiskey are consumed and where the skin is subject to chilling from cold weather.

Kidney disease is the most insiduous of all diseases. The doctors rarely see the case until the second or third stages are reached, unless albumin should be discovered by some insurance examiner, or the patient should be under the care of some careful diagnostician, who treats no case without a careful analysis of the urine. The insidiousness of the disease may be illustrated by the case of the professor who discovered that he was a nephritic subject by making comparison of his own urine with that of a patient he was examining and found himself in much more serious condition than his patient.

*Read by invitation before the Section on Medical Life Insurance, State Medical Association of Texas, Fort Worth, May 5, 1915.

A medical examiner who is lax in the matter of urinalysis is riding for a fall for his company. Many cases of incipient tuberculosis, especially in well nourished people, may slip by the examiner and some heart murmurs may not be heard, but the urine gives the danger signal of nephritis, by albumin, low specific gravity, high blood pressure, and by arousing the victim often during the night to pass the increased quantity of urine secreted. The chances are that such an individual will not ehange his habits of living and so postponement or rejection is the only safe course left open to the home office. I have often thought that all medical examiners for life insurance companies should take a special course in urinalysis, both microscopical and chemical, for many urines from patients past 50 have enough hyaline and granular casts to disqualify them for life insurance, even though the urine may be free of albumin.

We consume twice the quantity of food necessary for our healthful maintenance. The kidneys, liver and stomach are called upon to digest and eliminate this extra food supply, which is a great overload on an already overtaxed organ. As a result, many of us suffer from gastroptosis, retention of fermented food, colon stases, and consequent auto-intoxication. The damaging action of intestinal fermentation upon the kidney in undeniable. As soon as the blood stream becomes muddied, too acid from improper indigestion or from nitrogenous and protein food, the kidneys are immediately congested and changes in the renal epithelial cells result.

Patients past 50 years, with sclerosed arteries, should get back to the diet of the high chair if they would take this extra load from their kidneys. Immoderate eating, both in quality and quantity, should be rigorously curtailed whenever the kidneys and liver are failing to functionate. The urine of a meat consuming man is four times more lethal than the urine of a vegetarian, as proven by injecting the urine into the veins of rabbits; so the toxins from a carniverous diet are four times more irritating to the kidney than those produced by vegetable, cereal and milk diet. No clinician will dispute the fact that large meat eaters are more prone to nephritis than are vegetarians. Black coffee in excess is another of the most common irritants to the kidneys. A strong cup of coffee is equal to four grains of citrate of caffeine, in addition to the tannin which it contains; such a dose is often consumed by coffee drinkers from four to six times daily. Caffeine is an active urinary stimulant, raises the blood pressure and hastens heart action. When we take the morning *cafe noir* on awaking, coffee again at breakfast, and with the other meals, it is no wonder we have kidney disease. Many cities of the

south have this excessive coffee drinking habit, which not only irritates the kidneys, but destroys the appetite, impairs the digestion and damages the nervous system, on account of the amount of caffeine and tannin consumed. Excessive tobacco smoking produces the tobacco heart, hardens the arteries, and acts very much in the same way as coffee.

Many of us are more intemperate in eating than in drinking and smoking. With hurried lunches, half chewed, we trust to an overworked, dilated and sagging stomach to do the digesting without the aid of mastication or salivary juices. Much of our food is badly kept and poorly cooked, and undergoes fermentation as soon as it enters the stomach and intestines. The intestinal flora increase to a large extent and decomposition and auto-infection begin at once and continue throughout the 29 feet of bowels. Many who are exceedingly careful about the cess-pool on their premises, are quite negligent about the private sewer within their own bodies.

Auto-intoxication of pregnancy is another fertile source of kidney disease. The majority of physicians have learned to pilot the expectant mother safely through the kidney trouble incident to pregnancy.

The great consumption of iced drinks, tea, beer, etc., is responsible for many of the kidney lesions, especially among children. These drinks and iced foods are served so cold that the stomach is chilled for a long time. Tea is consumed by the pint, served with ice to the brim. Bright's disease has increased in the same proportion that soda fountains and ice cold drinks and foods have been popularized. For normal digestion, the stomach should register two degrees in excess of axiliary temperature. As a result of these iced foods and drinks, the stomach is often found to be from four to six degrees below its best working temperature, thus allowing the food to putrify, and resulting in auto-intoxication followed by nephritis.

Death may occur in from one to ten years in nephritis. We may carry the patient along comfortably for many years with a meat free diet, and abstinence from all alcoholic and malt drinks, and by keeping the kidneys sluiced and the bowels open. The chance for a patient to get well improves with years of prudent living, better habits, careful diet and the replenishing of the sick epithelial cells. One-half of the nephritic patients are over 50 years of age. The chronic interstitial type, by a proper dietetic management, with the free use of alkalin mineral water, may run on indefinitely, so this variety of the disease may be considered chronic. Many of us remember rejecting patients for albumin in the urine 20 years ago, who are at the present time in just about the same good condition, except for the matter of increased age.

The reason the kidneys do not burn out where they seerete the solid constituents of the urine, is because they are saved from combustion by the blood vessels circulating around the parts, protecting the solid secreting cells and mixing them with the watery portion of the urine just as the destructive effect of the gastric juice in the stomach is prevented from digesting that organ. The quickest and most fatal type of the disease is where there is an overlapping of the inflammation, affecting both the tubules and the glomeruli type of the disease. In this variety, both the excretion of solids and the watery portion, is reduced to a minimum. The chronic form of the disease is the vascular interstitial type, in which only one portion of the kidney seems to be involved at the time, and the sick cells seem to rehabilitate themselves before the other cells have lost their function.

The exciting causes of nephritis are always toxic, either from germ diseases, such as scarlet fever, auto-intoxication, or from drugs and chemical agents such as cantharides, chloroform, ether and phosphorus. Many of the cases are produced by rich food, resulting in hyperacidity in the blood and kidneys, with consequent inflammation of the organs, followed by nephritis. The majority of albuminuria eases are of toxic origin at the beginning, caused by ptomaine and auto-intoxication from decomposing nitrogenous food in the stomach and bowels. The epithelial structure of the secreting portion of the tubules and glomeruli, are very delicate; and any condition that hardens the vessels and increases the blood pressure, is liable to produce hyaline, or granular casts, with albuminuria. Any of the eruptive fevers, the toxins from pregnaney or abdominal tumors, back pressure from the kidneys, from stricture, enlarged prostates or tumors of the bladder, and bladder and urethral infections, are among the frequent causes of nephritis.

Exposure to draughts of cold air, acts as a predisposing cause. The skin and kidneys act vicariously, so when the kidneys are ailing, the skin should be made to perform the function of both. That is the reason why warm, southern countries are so often recommended to nephritic patients. The warmth produces the maximum amount of perspiration, which relieves the patients of a considerable amount of urea and other waste products of oxidation. It is on this same principal that hot baths and packs are so helpful during the last stages of the disease.

The usual symptoms of nephritis are albuminuria, convulsions, oedema, high blood pressure, dry skin, indigestion, uremia, nausea, defective vision, coma, anuria (in the large white

kidney), polyuria (in the small red kidney, occasionally one hundred ounces in 24 hours). Sleep is disturbed by the necessity of constantly getting up to void the urine. The symptom of dropsy rarely occurs except towards the end of the disease, and is then due to secondary cardiac complication.

Cardiac enlargment, dilatation and failure, dropsy, increased albumin, serous apoplexy of old age, diminution in amount of urine, headache and impaired vision, are among the more prominent danger symptoms of nephritis. The patient may develop retinitis to which they call an oculist's attention. Cerebral hemorrhage and paralysis usually terminate these cases, after a second or third attack of apoplexy.

A normal man at 30 should have a blood pressure of about 115 mm. of mercury; at 60, about 150 mm.; a constant 200 mm. blood pressure is a danger signal at any age. In arterio-sclerosis a high blood pressure is required to force the blood through the thickened inelastic arterioles. Unlimited toxines in the blood cause a presclerotic stage, that may be remedied by proper medication and a non-nitrogenous diet. The reductions of high blood pressure by the use of iodides, nitrites and trinitin in the advanced stages of kidney disease with arterio-sclerosis, is an almost hopeless task. In renal disease, high blood pressure follows deficient oxidation and elimination of nitrogenous waste. Excessive meat eaters, whiskey drinkers with constipated, sedentary habits, are some of the most frequent subjects of high blood pressure.

To differentiate the types it has been claimed that when we have anuria or very small secretion of urine, the nephritis is glomerular, as the watery portion of the urine is supposed to be secreted from that portion of the kidney. In polyuria the vascular and tubular types are the rule, as the solid portion of the urine is supposed to be secreted from the tubules. In tubular nephritis, we have more toxaemia and less swelling, whereas in glomerular nephritis, there is more swelling or dropsy, and fewer uremic symptoms. The vascular type of nephritis excretes an abundance of urine, with no anasarca, except at the termination of the case. In tubular nephritis the solids are secreted very slowly while the watery elements of the urine and the chlorides are more plentiful.

It must be understood that any arbitrary division of nephritis into different types of the disease will necessarily overlap, in many places, nevertheless urologists have divided the inflammatory process in the kidney into as many parts as the anatomy of the organ, *viz,* glomerular, tubular, vascular, and parenchymatous; but for clinical purposes three types are sufficient, namely, acute nephritis, chronic tubal and waxy lardaceous kidney. To my mind greater divisions than this are more or less imaginary, as I cannot conceive of an organ weighing only about three ounces being divided into four different kinds of inflammation, requiring as many different kinds of treatment. The anatomical structure of the kidney is so interwoven that all these types of nephritis must overlap each other in many places in any given case.

The treatment of nephritis resolves itself into hygienic, dietetic and eliminative. The hygienic treatment would move the patient threatened with nephritis to a warm, equable climate, where he would not be exposed to sudden changes of weather or chilling of the skin surface; where he could sleep in the open, take plenty of moderate exercise and keep the bowels well open and the kidneys flushed out. The dietetic treatment would have the patient consume an abundance of fruit, vegetables, cereals and milk. No over-feeding or gormandizing, especially avoiding condiments, pepper, meats and all alcoholic and malt beverages. Alkaline mineral waters and milk diet have the first place in the treatment of kidney infection, for just as the trash in the gutter is washed out by flushing, so are the kidneys and alimentary canal cleaned out by the drinking of an abundance of liquids. Hence mineral wells and springs have been largely recommended for these ailments.

We should treat the complication of nephritis symptomatically, as they arise. The severe and chronic types are rarely curable, but are much relieved by rest in the horizontal position, and by moderate purgation. When the sick are in excess of the well cells, there is not enough function left in the kidneys to eliminate the 500 grains of solid material excreted daily. Diluting toxines, mitigating infection and healing sick cells are, therefore, the main objects to be attained by any treatment. Restricted exercise and diet, an abundance of alkaline mineral waters, hot packs, steam baths and flannel underwear, constitute the general treatment of nephritis.

The principal foods allowed are buttermilk, cheese, breakfast bacon, fresh fish and oysters, with vegetables, toast, nuts and cereals. While milk should be the preponderating element of diet, it is not sufficient to rehabilitate the run down condition of the patient. Soda and lime water, vichy, alkalies, milk of magnesia, all diminish the acid and albumin in the urine, so the night voiding is not required so often. Dr. Fisher of Cincinnati, has proven that the alkaline treatment of nephritis increases osmosis, because of the salt content in the blood, and this in many cases has proven beneficial by lessening inflammation and curtailing the amount of albumin secreted. Salt produces thirst with consequent consumption of large quantities of water. Is it not just possible that the benefit

produced in these nephritic patients is dependent upon the large consumption of water instead of free salt diet? Dr. Fisher contends that nephritis is due to very acid urine and the foods that produce it. To neutralize this condition he prescribes large quantities of different alkalies, and an abundance of salt in all the foods that are consumed. A Murphy drip of sodium chloride is a mild diuretic and is suitable for use when the stomach rejects all medicines, on account of uremic vomiting.

I have relieved two patients who were almost moribund by the intravenous infusion of sterile water at 110° F., which was followed by profuse perspiration, and the removal of the kidney function, which had been dormant for some time.

RENAL FUNCTION TESTS.*

BY

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Determination of renal efficiency is desirable both to the surgeon and internist. The surgeon may gain a fairly accurate idea whether to operate or not; the best time to operate; what technique he shall employ, and what anesthetic to use. He can make a rough estimate of the patient's chance of recovery and carry out his post-operative treatment in accordance with his knowledge of the kidney condition. The internist may learn whether the condition which confronts him is renal, and whether or not it is surgical. He can diagnose a unilateral lesion and tell which kidney is involved. The results of non-surgical treatment can be noted. He may even be led to suspect a more serious condition than the clinical picture betrays. This was the experience of Geraghty and Rountree in a number of cases with little or no albumen and no signs of uremia, but with a faulty output of phenolsulphonephthalein. Among 58 cases reported by them, there were 13 with a total output, in two hours, of 10 per cent or less. In 10 of this number death occurred within two months. Tileston and Comfort report that in their series, patients showing more than 100 mg. of total nitrogen, in non-protein form, to the 100 c. c. of blood, with one exception, did not live more than 35 days. We all know that many persons in good subjective health have chronic nephritis. We also know that this disease is not incompatible with a feeling of wellbeing and ability to carry on regular business for some time after its incipiency; meanwhile, the disease is insidiously but surely making its way to a fatal termination. If a good test for renal efficiency were made a part of the regular routine examination of our patients, we might be able to sight this dread malady at a much greater distance than we are now able to do, and so be of more assistance to them than we are.

It is, I presume, needless to say that pathognomonic significance can not be assigned to renal function tests. They must be taken in conjunction with the clinical picture—history, physical examination, and other indicated diagnostic procedures. And if the weight of evidence from these other sources seems to contradict the verdict brought in by the tests, then they must yield.

The advent of the cystoscope and ureteral catheter have given added weight to renal function tests as well as added worth. For with these instruments we are able to study each kidney separately. Objection has been raised to the ureteral catheter on the ground that its introduction and presence in the ureter reflexly causes an inhibition of renal function and that there is bound to be some leakage past the catheter into the ureter, vitiating the results and hence the deductions. This matter has received comment both pro and con. Some investigators use a flute tipped catheter and maintain that they thereby obviate the leakage element. As to reflex inhibition, there seems a likelihood that such does occur in greater or lesser degree, although Smith of Boston, holds and produces statistics to show that there is no leakage and that there is no apparent difference or delay in excretion by healthy kidneys with or without the catheter, and that when the catheter is in one ureter and not in the other, the appearance of the drug is the same from each kidney, both as to time and as to the total quantity eliminated.

The phloridzin test is conducted as follows: One c. c. of a 1/200 aqueous solution of phloridzin is injected subcutaneously. Every 15 minutes the urine is tested for sugar. This substance, as is well known, sets up a so-called renal diabetes. After such injection, sugar appears, with a healthy kidney at the outset of the experiment, in one-half to one hour and may be present up to five hours following injection. The total sugar output is from .5 gm. to 3 gm. Now, in nephritis, the sugar output is less than .5 gm., or it may be absent entirely. Some consider this test to be on a par with the best, and say that it should be used to check others when used.

Another test is the estimation of the creatinin output in the urine. This may be applied to the total output or to that of only one kidney. It has been studied and reported recently by van Hoogenkinjze of the University of Utrecht. For it he claims these advantages: (1) Only 5 c. c. of urine are required; (2) blood in the urine does not interfere; (3) abso-

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lute and relative function are shown. The daily output of creatinin in the urine is fairly constant and proportionate to the weight of the body, especially if the patient abstains from meat. When meat is ingested, the daily output is slightly greater, but the difference is so slight that it can be disregarded. A healthy kidney excretes, under normal conditions, at least 8 mg. of creatinin per 100 c. c. of urine. Van Hoogenkinjze has devised a colorimeter by which an exact estimate can be made with the clinical method of Folin. It is as follows: 5 c. c. of urine are mixed with 15 c. c. of a saturated solution of picric acid and 5 c. c. of a 10 per cent solution of sodium hydroxide. This mixture is allowed to stand for five minutes and is then diluted with 250 c. c. of water, after which the color is compared with that of a semi-normal solution of potassium dichromate. The results were so satisfactory in the hands of this observer that the test has been adopted in the Utrecht clinic to the exclusion of all others.

Indigocarmine is also used as an indicator of kidney function. Dr. B. A. Thomas of Philadelphia, is the most ardent exponent of this test in the United States, and his wide experience with it adds weight to his conclusions. It is from a series of reprints from his pen, that I draw largely in speaking of this method. He prefers it to all others, and gives following reasons for his preference:

(1) Trustworthy evidence concerning kidney sufficiency or insufficiency is possible simply by observing the elimination of the dye from the ureteral orifices, obviating the necessity of ureteral catheterization, an act occasionally impossible of accomplishment for mechanical reasons, with certain forms of prostatic enlargement, and inadvisable, at least theoretically for a normal ureter in the presence of vesical tuberculosis.

(2) The elimination of ureteral catheterization dismisses any possibility of stimulated or repressed renal function, reflexly incident to the introduction of a catheter into ureter, an act predisposed to influence the physiology of the kidney.

(3) The lumina of ureters vary with age, the sex and size of patients; hence the employment of ureteral catheters commonly selected frequently fails to occlude the ureters completely. Consequently any test dependent upon the collection of the total urine for a given time, by this means, may be productive of erroneous results quantitatively. I have occasionally observed the elimination of a dye around the ureteral catheter several minutes prior to its appearance at the free external end of the catheter.

(4) In unilateral determination, the necessity is avoided of allowing the catheters to lie in the ureters for two or more hours, thereby inviting infection. In some cases, even after successful introduction of the catheters, the urine fails to flow from one or the other catheter, owing to occlusion of the eye by blood coagula, pus, or mucus, thereby vitiating the examination.

The technique of the test, essentially, as used by Dr. Thomas, follows:

(1) Injection into the muscles of the gluteal region of 20 c. c. of a 4 per cent solution of indigocarmine at body temperature.

(2) Careful irrigation of the bladder until the fluid returns perfectly clear, when it is filled with sterile boric acid solution.

(3) Observation through the cystoscope and a clear intravesical medium, under brilliant illumination, of each ureteral opening, alternately, for the first faint appearance of the blue. As soon as this occurs the precise time must be noted. Note should also be made as to whether the blue is light or dark; also, when during 30 minutes the color becomes intensified. Thomas says, in this connection, that:

"Indigocarmine is eliminated from functionally sufficient kidneys as a dark blue in from 3 to 20 minutes, and as a light blue not later than 15 minutes. In 90.1 per cent of cases it appears either as a dark or light blue in 15 minutes; in 61.1 per cent it is observed in 10 minutes. If the indigo does not appear at the expiration of 15 minutes (light blue) or 20 minutes (dark blue), it is evidence of serious insufficiency of the renal function. If the elimination of the dye does not appear at all, the respective kidney or ureter is gravely diseased. The intensity of the color reaction depends to some extent on the concentration of the urine, but largely on the individual excretory power of the organ. A surgically diseased kidney eliminates the dye less intensely than its normal twin organ, or not at all. The test is very simple and by alternate observations of the two ureteral orifices, differences between the two kidneys are readily made out and accurately and speedily noted."

He has worked out what he calls the index of elimination for indigocarmine. It is the ratio of the output of the first hour to that of the third hour. For normal individuals he has determined this to be 5.1. When the output for a third hour is equal to or exceeds that of the first hour, the patient is a poor operative risk, unless the total output for the first three hours is 20 per cent or over. The bladder must be emptied thoroughly by the catheter at the end of each hour. This test is held in esteem by all investigators, but they do not all concede to it the foremost position as a colorimetric method.

As to the relative merits of the phenolsulphonephthalein test, the reviewer of the subject of renal function tests in the issue of Progressive Medicine for December, 1914, says, "Since this subject was reviewed in Progressive Medicine in 1911, the phenolsulphonephthalein test has become firmly established as of undoubted value for determining the functional capacity of the kidneys and at the present time many neurologists believe it to be the most trustworthy single test for determining total renal efficiency." Dr. Henry A. Christian of Boston, says, "The phthalein test is the one for general use under all conditions." Dr. Geraghty, to whom the profession is indebted for bringing this test into common use in this country, says, "At the present time we

employ two tests, the phthalein test for the estimation of the excretory power of the kidney, and when its readings are very low, an estimation of the blood urea is also made. Given a patient with a very low phthalein output and a high retention of non-protein nitrogen, his condition can be considered critical regardless of clinical appearance, and such a patient is a bad surgical risk. " Dr. Janeway's opinion is: "From a broad point of view the phthalein test and the less satisfactory ones which it has replaced, have greatly contributed to the effectiveness of the treatment."

The solution of phenolsulphonephthalein used in the test, is of such strength that 1 c. c. represents 6 mg. of the chemically pure drugs, in an alkaline medium. This solution can be obtained put up in ampoules ready for use. When it is desired to make a quantitative estimation of total renal function, the technique is as follows:

(1) One c. c. of the phthalein solution from the ampoule is made up to 1000 c. c. with water and strongly alkalinized. This step is necessary to bring out the color, which is then a beautiful Bordeaux red. To it one worker adds, as a part of the diluting fluid, some of the patient's urine, gotten before the beginning of the experiment. This is to add the yellowish hue of the urine, which hue is necessarily in the diluted urine to be studied. This is the standard solution.

(2) The patient, whose renal function status is to be determined, is given every 15 minutes for three successive doses, a full glass of water, eight fluid ounces. This is to insure a copious excretion of urine. It is not material to test how much urine is put out, the essential thing being the total amount of the drug excreted in a known period of time. At the time of the last of the three glasses of water the patient is allowed to void, or better, is catheterized. This urine is discarded. The patient is also given subcutaneously or intravenously, exactly one c. c. of the undiluted, sterilized phthalein solution.

(3) The urine obtained at the end of the first hour is kept by itself, as is that of each successive hour, and all are titrated separately. The period of observation may, of course, be any that the observer desires. This varies with the method of observation; that is, whether cystoscopic or not.

(4) Each separate portion of urine is made strongly alkaline with sodium hydroxide, as was the standard solution. This is then diluted with water until its color, in column of the same cross-section as the portion of the standard solution used, exactly matches its color. The total number of cubic centimeters of diluted urine is noted, and the decimal point moved one place to the left. The resulting figure is the percentage reading for that particular portion of urine and the output for the time represented by it. To illustrate, suppose the diluted urine amounts to 400 c. c., then the reading is 40 per cent. The readings for the various intervals selected for study are then added and their sum is the total output for the whole time. The normal readings are, for the first hour, 40 per cent and for the second, 20 per cent, these figures having been arrived at after a large number of readings made on healthy individuals. Some workers use as standards a set of tubes prepared beforehand and sealed, which contain graded solutions of phthalein, from a color corresponding to an output of from 5 per cent, by increments of 5 per cent up to 60 per cent. The urine to be studied is alkalinized and diluted to 1000 c. c. A tube of this is then compared successively with the standard tubes until one is found which it most nearly matches in color. The percentage marked on this tube is the percentage reading for that time under observation. Suppose, for example, that during the first hour 200 c. c. of urine were voided and that this, when diluted to 1000 c. c., most nearly or exactly matches the color of the 35 per cent tube, then 35 per cent is the reading for that time.

It not infrequently happens that it is desirable to ascertain the time of first appearance of the dye in the urine. This, when one does not care for anything except total function, may be gotten by introducing a catheter into the bladder and allowing the free end to lie in some sodium hydroxide solution. As soon as the first phthalein appears, it shows itself by a reddening of the solution adjacent to the end of the catheter, because of the action of the alkali on the drug.

For the determination of separate renal function, that is, of each kidney separately, it becomes necessary to resort to some method of segregation. For this the cystoscope and ureteral catheter come admirably to our rescue. With an alkaline solution in the bladder one can note through the cystoscope the first appearance of the phthalein at each ureteral orifice, by the first reddening of the solution adjacent. If, moreover, a determination of the quantitative output of each kidney be desired, apart from that of its fellow, the ureters are catheterized, the catheters left in position and their free ends inserted into two receptacles, such as test tubes. The urine from each kidney can then be titrated separately.

When the injection is made intravenously, the first appearance in healthy kidneys is in about three minutes, and during the first fifteen minutes the output is about 15 per cent. When the injection is made subcutaneously, the time of the first appearance is from five to eleven minutes after injection. If the output for the first hour is 20 per cent or less, and

the time of first appearance twenty-five minutes or more after injection, the case should be looked upon as a poor risk for surgical interference.

Quite a good deal of attention has recently been called to a study of retained nitrogen and chlorine in the blood. There are, as is well known, certain substances which are normally in a constant concentration in the blood serum of healthy individuals, in transit from the tissues to the kidneys, where they are excreted as they are brought and appear in the urine. Here they also appear in a certain normal concentration. There is a normal ratio between the concentration of these substances in the blood and in the urine. Hefter and Siebeck determined that in healthy individuals, after food poor in nitrogen and chlorine, the nitrogen concentration of the urine is 20 to 40 times that of the blood serum and the concentration of chlorine 2 to 4 times. After reduction in fluid intake this ratio goes up, and it comes down after increase in the same. Disturbances of these ratios from causes other than over- and under-ingestion of fluids or solids, such disturbance resulting in an approach of these ratios to 1, indicate a pathological state. Thus, there is a type of nephritis characterized by nitrogen retention without any disturbance in the sodium chloride excretion of any noteworthy consequence. This type is characterized clinically by high blood pressure and uremic symptoms. The anatomical trouble is in the glomeruli. In this type sodium chloride acts as diuretic.

There is another type of nephritis in which the disturbance of equilibrium is in the sodium chloride concentration ratio, with little or no change from the normal as regards the nitrogen ratio. These patients have a tendency to edema with a low blood pressure and no uremic tendencies. At the bottom of this type, anatomically, is tubular pathology. Urea is diuretic even when all other remedies have proven of no value. This type is seen, without deviation, only in acute cases. They are more often seen mixed than pure. In other words, there is almost always disturbance in both nitrogen and chlorine, one or the other element being more markedly retained. Non-protein nitrogen in fresh blood serum is in the form of urea, ammonia, uric acid, creatinin, and purin bases, as well as a small modicum of undetermined nitrogen. Tileston and Comfort determined the total blood nitrogen, non-protein, to vary from 22.9 mg. to 25 mg. per 100 c. c. of blood, and the urea nitrogen to vary between 12 and 14, in healthy fasting adults. They worked with 5 healthy and 142 hospital cases, using the methods of Folin. In their series, the cases of chronic nephritis, both interstitial and parenchymatous, without symptoms of uremia, the total and urea nitrogen were but little inincreased. The uremic cases showed high increase of both. They consider the determination of total nitrogen alone to be of more value than the urea nitrogen alone. They think this to be of the greatest value in the diagnosis of uremia Amounts of 100 mg. or more were encountered in only two conditions besides uremia, namely, acute intestinal obstruction and profound anemia from hemolysis. Only one case of uremia without marked retention of total nitrogen was encountered out of a series of eight cases. This determination is also a great aid in the prognosis of chronic nephritis. It is also, they say, the best guide to the diet in such cases. With a considerable retention, restriction of the protein is required. In cases of outspoken uremia, however, no marked reduction of the nitrogen content of the blood may result from a diet low in protein. Nephritis with a normal amount of nitrogen in the blood, requires no great reduction of nitrogen in the diet. A marked elevation of this substance in the blood renders the patient a poor operative risk, and treatment to reduce it should be instituted to before operation is thought of. The determination of total nitrogen is made by means of the Kjeldahl process, modified variously by different observers. Preliminary to this the blood is treated with absolute alcohol and washed, the process being repeated a number of times. The aim is to remove all the coagulable or protein nitrogenous matter first.

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INTESTI-FERMIN.—"May we count on your assistance" ingeniously inquires the Berlin Laboratory, Ltd., in an advertisement appearing in a medical journal, and with cool effrontery continues "We are telling the layman about Intesti-Fermin . . , May we count on your assistance in spreading this message to everyone . . . ?" May they? (*Jour. A. M. A.*, Nov. 13, 1915.)

THE DIAGNOSIS AND TREATMENT OF INFECTION OF THE URINARY TRACT.*

BY

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Infection of the urinary tract, of any character, is attended by depreciation of the general health, making the individual an easy prey to subsequent disease of any sort. More than that, if allowed to advance it may produce permanent tissue changes in the kidney substance, or even destruction of the kidney tissue. Our duty, then, is to take the pains to recognize these conditions in their incipiency, before irreparable damage has been done.

Our attention is attracted to the urinary tract by the general and local symptoms, particularly when there is a pyuria. But finding pus in the urine is not locating the point of infection. Obviously, that is our first problem. We must then determine the type of infection, whether pyogenic or tuberculous and whether the infection is primary or secondary.

As to symptomatology, we may say that, in general, kidney infection gives signs of general toxemia, sometimes very profound, with septic temperature, prostration and attending symptoms, without much in the way of local symptoms. As exceptions to this general statement, we must remember that the early stages of infection, especially tuberculous, or infection secondary to stone or tumor, may give only slight elevation of temperature. If typical pyogenic infection of the kidney, the general symptoms are marked. Bladder infections, on the other hand, give little or no rise of temperature and few general symptoms of infection, but the local signs of bladder irritation, such as the frequency of micturition, burning, smarting, etc., are pronounced. The symptoms, therefore, help us in localizing the seat of the infection; but these are so varied and inconstant that we must fall back on our examination of the patient for final evidence.

Physical examination will show some tenderness over the pubes in acute cystitis. In kidney infections the physical findings are insignificant when compared to the general symptoms. If the infection is acute there is usually some tenderness over the kidney, and sometimes, in thin individuals, the kidney may be palpated, but not, as a rule, unless the kidney is enlarged. If one can feel an enlarged or even a tender kidney, it is worth a great deal in making a diagnosis. In most cases the kidney cannot be felt, and in most of the chronic cases there is very slight tenderness.

Examination of the urine shows a pyuria, which is of primary importance in establishing the fact that there is an infection somewhere in the urinary tract, but is of very little value in localizing the point of infection. The urine must be obtained by the catheter in order to eliminate urethritis, prostatitis, leucorrhea, etc. Tubular casts, leucocytic or otherwise, as is possible in some cases of pyonephritis, means that the kidney is involved. Much stress is sometimes laid on the character of the epithelial cells found; but from a practical standpoint this is a waste of time, for the shape of the epithelial cells soon changes in the urine, and by the time they are under the microscope no one can give more than a good guess as to their origin. The urine is usually large in amount, with low specific gravity and low solids, in kidney infection.

Rectal examination, which should always be made, may detect an infected and enlarged ureter, or even locate a stone in its lumen, or in the bladder.

In infections confined to the bladder, the quantity of albumen is comparatively small; and it increases with the kidney involvement. Irrigation of the bladder gives considerable information as to the location of the infection, for if the pus in the bladder comes from the kidney, the bladder is easily cleansed, and the irrigating solution soon returns clear and remains so for some little time, while if from an infected bladder, it is very difficult to clear up, and when clear for a time, the pus quickly reappears.

In chronic cases there is more or less of a rise in blood pressure, while in acute infections a leucocytosis is usually present, which tends to persist if the kidney goes on to chronic suppuration.

Even after careful physical examination and careful analysis of the urine, there will be a good percentage of cases in which it is not yet clear what part of the urinary tract is infected, and it is in these cases that we resort to the use of the cystoscope for a positive diagnosis. By means of the cystoscope the entire bladder is explored, and any pathological condition is determined or excluded. If the bladder is normal, we know that the infection is in the ureters or kidneys. Inspection of the mouth of the ureters may show some change, which points at once to one or the other kidney, or both. The examiner may actually see the pus coming out of the ureter in some cases. In other cases there will be some inflammation of the bladder, but not enough to give assurance that there is not also an inflammation higher up. In these cases, catheterization of the ureters gives positive proof, not only as to whether or not the kidneys are involved, but also which kidney. The functional test will enable us to determine the kind of work the

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kidney is doing, as the elimination from the affected kidney will always be considerably less, and from the amount of excretion within a given time we are able to form an opinion as to the extent of damage to the kidney.

The next question to be determined, is the nature of the infection, whether pyogenic or tuberculous, and whether it is primary or secondary. If the infection is in the bladder this question is solved at the time of making the cystoscopic examination, which reveals at once the presence of calculus, tumor, tuberculous ulcer, or simple cystitis, acute or chronic. When the cystoscopic examination fails or when, exceptionally, a cystoscope cannot be introduced, the calculus sound, and also the *x*-ray should be used. Very severe pain after urination strongly suggests the presence of stone. In simple cystitis, little or no blood is found in the urine, while with papilloma or carcinoma, a large amount of blood is found, as a rule. With calculus a smaller but rather constant, amount of blood occurs. A search for tubercule bacilli in the urine will give positive results in only a small percentage of cases of tuberculous ulceration, unless carried on a long time. Tuberculin is of distinct value in the diagnosis of urinary tuberculosis. Often, where they have not been demonstrable before, there is a throwing down of tubercule bacilli during a positive tuberculin reaction. Inoculation of guinea pigs with the suspected urine gives the best chance for a positive diagnosis, without the cystoscope, and the method should be used much more than it is at present. The demonstration of tubercule bacilli in the urine makes the diagnosis of urinary tuberculosis, and from what we know about the character of the disease, it is positive evidence that one or both kidneys are involved.

In kidney infection we have to differentiate between the following conditions: Pus infection, either pyelitis, pyonephritis, pyonephrosis, hydronephrosis, cystic kidney, tuberculous kidney, tumors, malignant or benign, and calculus.

The history of the case will show in all pus infections of the kidney, marked prostration and toxemia, depending upon the amount of infection; usually some tenderness over the kidney, which may or may not be enlarged, but is not usually palpable; septic temperature; pain in the loin, and frequent mild attacks of so-called renal colic, due to the blocking of the ureter with pus. I might say, parenthetically, that the pain is usually on the side of the diseased kidney, but is occasionally referred to the opposite side, and therefore cannot be taken as an absolute criterion in locating the diseased kidney. In a pus kidney the urine will usually be increased in amount; contains a large amount of pus, albumen and usually cast, and little or no blood. The pus may be intermittent, due to complete, temporary blocking of the ureter, in which case the symptoms of sepsis become more pronounced.

It is usually not possible to tell just how much of the kidney is involved; whether it is a simple pyelitis, a pyonephritis, or pyonephrosis, but in general the more extensive the involvement, the more profound the symptoms of toxemia. In hydronephrosis we have simply a damming back of the urine, without infection. There is no sepsis no pyuria, but a characteristic history of partial or complete anuria, followed by polyuria, repeated in sequence over a long period of time. At the same time, there may be a history of the appearance and disappearance of a tumor in the region of the kidney, synchronous with the change in the flow of urine. With the appearance of the tumor there may be some pain, which is relieved when the kidney drains. These symptoms are pathognomonic of hydronephrosis, and should give a clear cut diagnosis.

Cystic kidneys give the general symptom of a chronic nephritis, with similar urine findings, except that blood is present in about 20 per cent of the cases. In addition, a much enlarged and sometimes more irregularly shaped kidney will be found on examination, either unilateral or bilateral.

Tuberculous kidneys produce the general symptoms of pallor, anemia, emaciation and afternoon temperature. The kidney is usually small and only slightly tender, and not palpable, as a rule. Frequency of urination is a rather constant symptom, even when there is no involvement of the bladder. In fact, in many patients it is the only symptom causing complaint. Many of these cases are treated for cystitis, only to have the condition aggravated. The urine is increased in amount, and contains both pus and blood in moderate amounts. The presence of blood, either macroscopic or microscopic, is very important as a diagnostic aid, for it is nearly always present. Albumin and a few hyaline casts are usually present. After repeated examination, tubercule bacilli can be found in the urine in about four-fifths of the cases. The tuberculin test should be made after the patient has been examined for other foci of infection. Inoculation of guinea pigs with the suspected urine will give positive results in a large percentage of cases.

If infection is secondary to a tumor of the kidney, the tumor is usually palpable. The general symptoms are usually slight until there is secondary infection, when septic conditions develope. A feeling of weight in the back, with an occasional attack of mild renal colic, due to the passing of blood clots, constitutes the chief subjective symptoms. Varicocele, especially on the right side, makes one think of kidney tumor. The urine shows, as a rule, intermittent hemorrhages, with little or no pus at first,

and periods when there is no blood. The characteristic thing about the urine is the large amount of blood during the hemorrhage.

Renal calculus, if moving in the pelvis of the kidney or ureter, gives the typical renal colic. It must be borne in mind, however, that most of the so-called renal colic which we see, is due, not to the passage of stones, but to pus and blood clots. The *x*-ray should be used to confirm the diagnosis when stone is suspected. The waxed end ureteral catheter has been used, and is valuable, but it requires an expert to use it. This and the *x*-ray will rule out stone lodged in the ureter. The urine contains a small amount of blood and pus. The blood is usually increased after exercise or examination.

Before we dismiss the question of diagnosis, it should be urged that it is not sufficient to locate the infection and tell whether it is primary or secondary; cultures from the urine should be made to determine the organism causing the infection, for the prognosis and treatment will depend somewhat upon the character of the infection.

Bladder infection secondary to tumors or calculus, should be treated by removing the primary cause. The treatment of cystitis should be based on the character of the infecting organism, some bactericidal agent known to be inimical to the particular form of infection being used. The organisms most important in this respect are tubercule bacilli, gonococci, colon bacilli, typhoid bacilli, staphylococci and streptococci. When tubercule bacilli are found, one may say with almost absolute certainty, that the disease is renal in origin and surgical in treatment. A tuberculous kidney should be removed as soon as the diagnosis is made, provided that other kidney is good, and the patient's condition permits. Less radical treatment only makes the operation more difficult, and endangers the patient's life from more extensive involvement. Gonococcal cystitis will disappear under the use of oil of copaiba, or oil of sandalwood. Colon and typhoid bacilli are more affected by urotropin, in doses of from 3 to 15 or 20 grains, 4 times a day, according to toleration. The diphtheria bacillus calls for the administration of antitoxin, but it is rarely found. If the proteus is found and the urine is alkaline, give benzoic acid in 10 to 15 grain doses to make it acid, and then follow with urotropin. Staphylococci and streptococci also call for the use of urotropin. If the bladder is tuberculous it may be necessary to make a vesicovaginal fistula or suprapubic drainage in order to give constant drainage. Antiseptics are of doubtful use, but may be tried. Irrigation of the bladder is usually very painful, but if tolerated is of distinct benefit. Silver nitrate solution should be used, 1-5000 to 1-500 strength. A patient with a tuberculous bladder or kidney needs the same fresh air and nourishing diet that we give for tuberculosis in any other part of the body.

In secondary kidney infections, it is evident that the primary cause must be relieved. Kidney tumors and cystic kidney practically always require a nephrectomy. In all pus infections of the kidney, the patient should be put to bed at once and treated as in any septic condition. Urinary antiseptics, such as urotropin, probably help and should be used. If only a pyelitis is present or a mild pyonephritis, operative treatment is not indicated, but if there is marked infection of the kidney tissue, or pyonephrosis, the kidney should be opened and drained, or in selected cases removed, providing most of the kidney tissue is destroyed. Hot fomentations over the kidney region frequently give marked relief, and are of distinct therapeutic value in kidney infections. Irrigation of the pelvis of the kidney for pyelitis, through the ureteral catheter, may be of benefit. Rest in bed should be insisted upon in all cases, and a large amount of soft water should be given during the course of treatment.

A DENTAL VIEW OF THE PRESENT TREATMENT OF PYORRHOEA ALVEOLARIS.*

BY

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Pyorrhoea alveolaris is a suppurative disease of the peridental membrane, alveolar process and gum tissue supporting and surrounding the natural teeth. It causes the loss of the teeth by destroying these tissues. In order to readily grasp the intent of treatment and apply the remedy to the disease, it is necessary to briefly review some of the conditions found in connection therewith, and their causes.

Writers have classified this disease according to the cause, symptoms, manner of development and the progress made in the destruction of the tissues involved. These classes cover every symptom from a simple gingivitis to the loss of all the surrounding tissues, and the falling out of the teeth. One form may attack the peridental membrane at the neck of the tooth, and progress rapidly in its destruction to the apex of the root, without destroying the alveolar process. Another form may act slowly and destroy the membrane and the process with little shrinkage or loss of gum tissue. This form often produces abscesses that open through the gum. Another form may destroy the three tissues simultaneously on one side, or

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entirely around the tooth, destroying the membrane slightly in advance of the process and the gum. One or all of these conditions, accompanied by different degrees of inflammation and suppuration, may be found in the same mouth at the same time. Therefore, no classification has been generally accepted and none will be used in this paper, except the divisions used by Dr. Medalia, which is as follows: (1) Incipient, (2) Moderately Advanced, (3) Far Advanced.

The quantity of pus generated in pyorrhoea conditions varies from a microscopic specimen to a profuse flow when the tooth is moved or the gum compressed. The acute and more progressive conditions generate the greater amount of pus.

Prevalence.—It is estimated by dentists of wide experience in the treatment of pyorrhoea that the majority of adults over thirty years of age contract the disease in some form. Also, that most people past forty years of age lose more teeth from pyorrhoea than from caries.

Cause.—The primary cause of pyorrhoea is irritation. The irritants may be classed as mechanical and medicinal. The secondary cause is biological. The mechanical irritants include tartar deposits, both salivary and serumal. The impaction of food between the teeth, wounding the gums, is a frequent cause. Imperfect fillings left impinging on the gum cause irritation. Ill fitting crowns, too large for the teeth, pressed against the gum serve as a constant irritant. Imperfectly constructed bridges that cannot be cleansed, and partial plates not properly fitted about the necks of the teeth, keep the gum tissue irritated. Irregular teeth that are crowded in the arch, preventing their convenient cleansing and so retaining food and debris in contact with the gums, usually present irritation. Teeth adjoining a space caused by extraction tip forward or backward and present a surface not easily cleansed, and which is among the first points of infection in a case of pyorrhoea.

Medicinal irritants are the metallic salts that produce salivation or any inflammation of the gums. It is a frequent occurrence for people to date their gum trouble as beginning with a case of salivation. The biological causes are those which produce local infection. The bacteria most commonly found in pyorrhoea are the pneumococcus, staphylococcus, streptococcus, and M. cartarrhalis. The pneumococci usually predominate. These bacteria make the attack at some irritated point at the gum margin, though it is generally conceded that they may attack the pericementum about the neck of the tooth simultaneously, without any visible or known cause of irritations, although a reasonable explanation may be offered for such infection, as non-use of the teeth, for want of antagonists; excessive use; shock; strain, etc. Bacteriologists tell us that these germs are found in nearly all mouths, even those showing no signs of disease.

In recent articles by Barrett, Smith, Bass, Johns and others, the amoeba is accused of being the most important factor in the production and continuance of pyorrhoea. After examining over 300 cases, Bass and Johns claim the amoeba to be the specific cause of the disease, and that it is not found in the mouth in the absence of the disease. Other investigators hold different opinions as to the presence of amoeba in healthy mouths, and the part these parasites play in pyorrhoea. I quote the following from a personal letter, April 28, 1915, from Dr. Thos. B. Hartzell, Minneapolis, Director of the Mouth Infection Research Corps of the National Dental Association: "I find the amoeba present in about three-fourths of the mouths of patients I examine, many of whom have no pyorrhoea whatever. We find the amoeba to be constantly loaded with microorganisms. I have seen as many as seventy-five micrococci within the protoplasm of a single amoeba."

In view of the above considerations, I believe that pyorrhoeal infections are not due alone to the presence of these organisms, including the amoeba within the mouth, but to the local and systemic condition which enable them to get a hold on the tissues surrounding the teeth. Diseases which lower the resistance are important factors in bringing on an attack. Irritants prepare the tissue for attack and the bacteria and amoeba take hold and are principally responsible for the continuance, or recurrence of the disease.

Treatment.—The treatment of pyorrhoea is not empirical but rational, and within the bounds of conservative medical practice. It is based on the theory of removal of the cause and assisting nature to repair the damage. The treatment may be divided into operative, medicinal and prophylactic.

The operative treatment consists principally in the removal of all deposits, polishing the surfaces of the roots of the teeth that have been denuded of the membrane, and curetting the necrosed and irregular, sharp angles of the alveolar process. To do the work correctly requires specially shaped and tempered instruments, and the development of a high degree of skill in their handling. Unless this part of the work is done well no amount of medicinal or other treatment will effect a cure. On the other hand, many dentists have become sufficiently skilled and thorough in this part of the work to claim to cure between 50 per cent and 75 per cent of all cases of pyorrhoea they treat, assisted only by ordinary local medication, and thorough prophylaxis

practiced by the patient. These figures are not too high, and the percentage may be raised much higher by the use of agents to be mentioned later in this paper. This does not mean the saving of every tooth in a mouth affected by the disease, for when a tooth loses 2/3 to 3/4 of its attachment, and is very loose, as a rule it should be removed. However, many teeth that are loose may be tightened, splinted or fastened together and made to give service indefinitely. It is often necessary to remove the pulp, and to amputate the root of a pyorrhoea tooth, which will restore its function and prolong its usefulness.

Medicinal treatment has its place in the cure of pyorrhoea, and is used locally and systemically. The agents used locally are for reducing inflammatory conditions, cleansing and disinfecting pyorrhoea pockets that fail to heal by first intention after operation. The iodine preparations are valuable for this purpose and for stimulating a healthy granulation of tissue. Warm salt solutions should be used for two or three days following operation. Lime water, magnesia and other alkaline agents are used to neutralize the acid condition of the secretions of the mouth. Mouth washes containing antiseptic, astringent and alkaline properties are valuable adjuncts to local treatment. Phenol-sulphonic and lactic acids, have been used to advantage in burning out pockets that failed to yield to ordinary treatment. Some operators use acids much more freely than others. If used at all, they should be used with extreme caution.

The medicinal agents ordinarily used systemically are for the elimination of the poison that has been absorbed, to stimulate excretions, neutralize the acid condition of the secretions, and tone up the system to overcome the ravages of the disease. Diet and abundance of water, exercise and personal hygiene are important factors in the elimination of the disease.

Vaccine therapy has become one of the recognized necessary adjuncts to the treatment of pyorrhoea. It is indicated in advanced cases and all other cases where the resistance is law, and the tissues do not yield readily to the treatment described above, when it is thoroughly done. The nature of this disease is such that in the advanced stages, a condition develops in the alveolar process similar to osteomyelitis. This change in the bony tissue shows clearly in a good x-ray picture The infection is a mixed one and therefore in all such cases tests should be made to determine the kind of bacteria involved, and the treatment applied accordingly. Autogenous vaccines are preferable to the stock vaccines in the treatment of such cases, though some prefer to use the two mixed. The stock vaccine should be selected according to the opsonic index shown in the case. The most complete report that has even been furnished the dental profession on the use of vaccines in pyorrhoea, was by Dr. Leon S. Medalia, a physician of Boston, in 1912. His investigations covered 115 cases, treated during a period of five years, from 1907 to 1912. Some of these cases were under observation for three years after treatment. The summary of his report shows that he divided the cases into three groups, classified as follows:

Incipient	14 cases;	13 cured, 1 improved
Moderately advanced	16 cases;	15 cured, 1 improved
Far advanced	85 cases;	37 cured, 40 improved

4 not improved; 3 dropped out, and 1 no record.

The percentage of cures in the first two groups is 92 and 93, respectively, which is higher than any operator would claim to get without the vaccine. The duration of treatment of all of these cases ran from 2 to 9 weeks, and the number of treatments from 2 to 38. The systemic disturbances reported with these cases were rheumatism, 42 per cent; gastro-intestinal, 50 per cent; skin affections, 13 per cent; chronic catarrh, 6 per cent. He concludes that "the vaccine treatment of this disease, together with proper attention to diet, cures or relieves the systemic diseases, especially the rheumatic affections." He says further, "I wish to say here that local surgical treatment by the dentist is absolutely necessary, in conjunction with vaccine treatment, for the final successful outcome of the case. It is not to be expected of vaccine treatment that it supplant, but rather it should supplement surgical treatment. Similarly we cannot expect local treatment alone to do it all, because as long as the resistance of the patient remains low to the particular infecting agents involved, just so long will the disease persist.

The investigations and reports made by Barrett and Smith, and by Bass and Johns, on the treatment of pyorrhoea by the use of emetine, and other preparations of ipecac, are wonderful indeed. Some of the cures reported seem almost miraculous. Other writers have reported equally good results on a smaller scale, even to the relief of systemic conditions attributable to the mouth infection. I have seen some good results. Most cases show improvement, but others very little or none. Dr. Hartzell reports that in treating sixty odd cases of pyorrhoea by hypodermic injection of emetine, one case showed pus completely checked, a number showed a reduction of pus, but there was little change in the tissues adjacent to the teeth, and that he had not seen a cure or anything approaching a cure from this treatment alone. It will not be questioned that emetine is the specific for destroying the amoeba, and if properly administered will rid the system entirely of the parasite, but it is

not settled that the amoeba is the specific cause of all pyorrhoea, and therefore emetine cannot yet be considered the specific cure, when used alone or in conjunction with operative and prophylactic measures, except where the infection is kept up by the amoeba alone. It is possible that there has been some difference in the technic used and some difference in the infection treated, that such varying results have been obtained.

Another method of treating pyorrhoea medicinally, is the Dunlop vapor treatment. This method has been in use about two years and has given good results in the hands of some operators in most of their cases. It is an oxygen gas charged with ethyl borate, and is applied with a blunt syringe point under the free margin of the gums where the gas enters the lymphatic tubes and travels through them into the diseased tissue. The theory of this treatment is that the oxygen gas and ethyl borate come in direct contact with the infecting agents and destroy them.

Succinimid of mercury has recently been used by deep muscular injections, in the treatment of pyorrhoea by Drs. P. G. White and B. L. Wright of the United States Navy. The reports on the results of this treatment are most favorable, but it is too new to express an opinion as to its popular adoption.

Pyorrhoea may be pronounced cured when the production of pus has stopped, inflammation subsided and gum tissue resumed its normal color and closed tightly about the teeth.

As soon as the treatment of pyorrhoea is begun, it is necessary to so instruct the patient that he may and actually will keep the surfaces of the teeth clean, that is, free of deposits and plaques, and that the teeth are properly brushed, the gums massaged to stimulate a healthy circulation and give a normal tone and firmness. Persons who have had pyorrhoea, with a great deal of recession, will find it more difficult to keep their teeth clean than before they had the infection.

Oral prophylaxis, if properly and continuously practiced in healthy mouths, will prevent more than nine-tenths of the pyorrhoea, if practiced by those who have been cured of the disease will prevent its recurrence in most cases.

Camphor: Natural and Synthetic.—Though having the same chemical composition, natural camphor is levorotatory, while synthetic is optically inactive, it being a mixture of levorotatory and dextrorotatory molecules. Synthetic camphor, used externally and in moderate doses internally, has been reported to have the same effects as natural camphor. The evidence is, however, unsatisfactory. The natural product being readily obtainable, there is no warrant for the therapeutic use of synthetic camphor until more conclusive evidence is at hand. (*Jour. A. M. A.*)

THE STREPTOCOCCUS VIRIDANS AND ITS RELATION TO ARTHRITIS DEFORMANS AND ENDOCARDITIS.*

BY

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Part of this paper is from my personal experience and part from what was patiently explained to me by Drs. Rosenow, Billings and Gaarde, of Chicago.

I received my introduction to this dangerous and interesting micro-organism while under the instruction of Dr. J. J. Terrill, at the time Professor of Pathology in the University of Texas. As was usually the case, I learned no more about it than I required to know in order to pass his examination. It next came to my attention early in 1913, when I read an article by Drs. Billings and Rosenow on "The Etiology of Articular and Muscular Rheumatism." In January, 1914, I spent three weeks in Chicago, under Rosenow and Gaarde, and there became really enthusiastic over the subject.

The Streptococcus viridans is one of the pneumococcic groups of bacteria; that is, an intermediate form between the pneumococcus on the one hand and the hemolytic streptococcus on the other. It occurs in pairs or short chains, and the chain is usually composed of an even number of cocci. They grow on almost any media, but best on ascitis agar, ascitis dextrose agar or blood agar. They ferment manite and lactose. They grow readily in broth, but as they are usually associated with other organisms, this method is unsatisfactory. The characteristic cultures are on blood agar, where they grow as small grayish green colonies, surrounded by an area of greenish hemolysis. They are gram positive; often it is almost impossible to distinguish them in stained smears from staphylococci, but the test upon which I rely is this green hemolysis of blood agar.

In preparing the blood agar I use human blood only, I have never tried any other, so I cannot say what the result would be.

These bacteria grow best at a medium or low temperature, that is, between 30 and 35° C, and I have gotten growths with the temperature as low as 22°, but these growths seem to have lost their virulence, as they died on the second subculture. They occur in nearly every mouth. Out of 20 persons with apparently normal teeth, gums and tonsils, 16 produced a positive culture. These persons were of all classes, laborers, clerks, nurses, doctors and housewives. I have recovered them in 12 cases out of 15 of pyorrhoea alveolaris and I believe that my failure in the three cases was due

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to faulty technique in procuring my specimens. In 6 out of 10 cases of tonsilitis in which the culture was made from the depths of the tonsils, I found the organisms. Three out of the 6 showed arthritis deformans, myoscitis or some cardiac involvement. There has been in each case, where there were lesions in other parts of the body attributable to the Streptococcus viridans, some other organism present, usually hemolytic streptococcus or the staphylococcus. This seems to indicate that they grow best in symbiosis with some other bacteria. In one case of endocarditis and two cases of arthritis deformans, I was unable to find the Streptococcus viridans in any focus.

I will not take up time with an explanation of the tests and experiments made Dr. Rosenow, as they are all more or less familiar to you. He has succeeded in transforming the pneumococcus into the Streptococcus viridans, and from this into the hemolitic streptococcus. I saw a few of the animals he had inoculated with the Streptococcus viridans, but as is usual with a fellow who has only a limited time and many things to see, I did not follow the experiments as closely as I should have done.

I returned from Chicago with the Billing's idea fixed strongly in my mind—that is, that almost every disease is due to some focus of infection from which the person receives a toxemia, sapremia (if I may use that term) or septicemia. I am now constantly hunting that focus in all my patients and have succeeded in finding them in a large percentage of them. The usual foci are in the mouth, nose or pharynx, especially in the teeth and tonsils; these foci may, however, be found in any part of the body in the appendix, the genito-urinary system, gastrointestional tract, respiratory system, and so on.

But I will not go into a discussion of the phase of the subject, except as to arthritis deformans and endocarditis. To date we have had 5 cases of arthritis deformans and 2 cases of acute endocarditis. The best way to discuss these will be to take up their histories, with the notes made on the cases at various times:

Case 1.—Mrs. M., age 42. Complained of stiffness and soreness of the terminal phalanges of the index fingers. History negative, except for the removal of pus tubes some four years previous, and a tonsillectomy. Examination of the heart, chest and gastrointestinal tract, was negative. Reflexes normal, slight swelling and retardation of motion of the index fingers. Complained of hurting on movement. The teeth were normal and the tongue slightly coated. The stumps of the tonsils were apparently normal. They were removed. S. viridans were present, with hemolytic streptococci. A vaccine was made and administered, with improvement under treatment at end of eight months.

Case 2.—Miss E. Generalized arthritis—both hips, the toes, fingers and left elbow. The disease has been progressing for a number of years. The tonsils were removed five years ago. Teeth negative. Several cultures from the gums were negative. No focus found. She was referred to Dr. Billings, who found abscesses at the roots of two apparently sound teeth, from which S. viridans were recovered. There has been slight improvement from the vaccine.

Case 3.—Miss J. Tacchycardia and frequency of increased respiration. The patient has had both endocarditis and myocarditis, and tonsilitis four months ago. The tonsils had never returned to the normal. One tonsil was removed, with severe hemorrhage. Removal of the other was postponed. S. viridans recovered from the tonsil, and vaccine gave slight improvement. The patient has refused to have the other tonsil removed.

Case 4.—Mrs. F. Beginning arthritis deformans. Was referred to us by Dr. F. The tonsils were inflamed subacutely. Tonsillectomy was done and S. viridans recovered. Vaccine was used with marked improvement, when last seen four months ago.

Case 5.—Mr. M. Complained of shortness of breath (and many other symptoms). Diagnosis of endocarditis, acute exascerbation of an old endocarditis, was made; probably due to a focus in the teeth. S. viridans were recovered from the teeth. A vaccine and digitalis were administered; the pyorrhoea was treated by Dr. E. There was prompt improvement, the acute symptoms subsiding. The patient was feeling better than he had felt in years, two months ago.

Case 6.—Mrs. Y. Arthritis deformans for 4 years. The first two fingers of each hand were involved. The tonsils were removed two years ago. Had no teeth at the time of examination. A specialist reported the air passages normal. There were enlarged glands at the elbow, which the patient refused to have removed. Feces and blood negative. Unable to locate the focus. There has been no progression since the teeth were removed one year ago.

Case 7.—Mrs. A. Arthritis deformans. The tonsils were found to be infected, everything else negative. The tonsils were removed. Cultures were negative. Improvement slight on treatment with mixed vaccine from another case.

Another interesting case in which S. viridans played a part, was that of a man, age 52, hurt in an accident. He had been in bed for some time and apparently getting along well, when he developed a high temperature, pyuria, and a bad pyorrhoea. There was also, an enlarged and tender prostate. Cultures made from the pyorrhoea showed S. viridans and Staphylococcus albus. Later on abscess formed in the prostate. The abscess was drained and a part of the wall taken. This gave cultures of Streptococcus viridans and Staphylococcus albus. It is possible that infection spread through the blood from the gums.

Iron Solution for Intravenous Therapy.—This solution, manufactured by Perkins and Ross, Colorado Springs, Colo., contains soluble iron phosphate as its essential constituent and is recommended as a "chalybeate, emmenagogue and tonic." As the intravenous administration of a drug like iron, which must be continued for long periods, cannot be considered the method of choice, as the composition of the solution is such that changes may occur on standing, etc., which would make the preparation dangerous and as the method of marketing the solution does not insure its sterility, further increasing the danger of its use, the product was refused recognition by the Council on Pharmacy and Chemistry. (*Jour. A. M. A.*)

SOME EYE COMPLICATIONS RESULTING FROM DISEASES OF THE NOSE AND ITS ACCESSORY SINUSES.*

BY

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In order to have a comprehensive knowledge of the relationship between the nasal accessory sinuses and the eye, a fair knowledge of anatomy of these parts is essential. It is necessary to have not only a knowledge of the very close relation due to the peculiar osseous structures entering into their formation, but it is also essential that we be familiar with the sensory, motor and sympathetic nerve distribution and blood supply.

The orbit is surrounded on three sides by the nasal accessory sinuses and is separated from them by very thin partitions of bone, which are not always continuous, but in places have dehiscences which are bridged over with membrane, thus supplying a very easy route for the transmission of inflammatory processes.

The floor of the orbit is a thin plate of bone which separates it from the maxillary sinus. The sphenoid sinus and ethmoid cells are separated from the orbit upon its inner aspect by a bone of paper-like thinness, and we are taught by anatomists that in many instances the sheath of the optic nerve is adherent to the periosteum of this so-called *Lamina papyracia.* The frontal sinus is also in very close relation with the orbit. This close proximity of the sinuses to the orbit makes the latter very susceptible to infections by contiguity.

The nerve relations of the orbit to the nose and sinuses is made clear by a study of the distribution of the first and second branches of the fifth nerve, together with ganglionic connections through which we get reflex pain, and of the third, fourth and sixth nerves, by which we may get paralysis of ocular muscles, both extrinsic and intrinsic.

The trigeminal nerve upon leaving the Gasserian ganglion divides into three branches. The first branch is known as the ophthalmic nerve. This nerve is entirely sensory and is distributed to the orbital cavity and its contents, to the skin of the forehead and anterior part of the nasal cavity. The second branch, known as the maxillary nerve, is also a sensory nerve and supplies the posterior part of the nasal cavity with sensation, also the skin of the nose, upper lip, lower eyelid, palate, the teeth of the upper jaw, and partly the skin of the temporal region. With the third branch, the mandibular, we have nothing to do in this paper.

We are taught that ganglia are simply relay stations along the course of nerves, where impressions are received and transmitted. If there is pressure, irritation or inflammation along the course of some of the terminal branches of the first and second division of the fifth nerve, the impression may be transmitted to the eye through the Gasserian ganglion. This is demonstrated more clearly by the naso-ciliary nerve, a branch of the ophthalmic division of the fifth. The naso-ciliary, as it passes through the orbit, divides into two terminal branches, one of which ramifies in the orbit and eyeball while the other is distributed to the nasal cavity, supplying sensation to these parts, especially the region of the middle turbinal bones. Tracing the naso-ciliary further, we find its branches, the long root of the ciliary ganglion and the long ciliary nerves, which enter the eyeball and supply it with sensation. The posterior ethmoidal nerve, also a branch of the naso-ciliary, supplies the posterior ethmoid cells and the sphenoidal sinus. The anterior ethmoidal nerve, another branch of the naso-ciliary, supplies the anterior ethmoidal cells and the posterior part of the nose. The infratrochlear branch of the naso-ciliary supplies the upper and lower lids. Thus we find that through the branches of the naso-ciliary nerve alone, the eyeball is very closely allied to the anterior and posterior ethmoid cells, the sphenoidal sinus and the nose.

Kirk, in his text-book on physiology, says that the cerebrospinal and sympathetic systems are not distinct from each other, and are only separated for convenience of description. The sensory root of the Gasserian ganglion is by many physiologists included as a sympathetic nerve structure. Its sympathetic characteristic is very closely demonstrated in the reflex ocular symptoms produced by irritation along the branches of the trigeminal in its distribution in the nose and accessory sinuses.

The study of the nerve relations of the eye to the nose and its accessory sinuses, becomes more complex as well as more intimate when we consider the ciliary and sphenopalatine ganglia.

The ciliary ganglion lies in the orbital cavity and is made up of three roots; a motor root, from the oculomotor nerve; a sensory root, from the naso-ciliary, and sympathetic fibers from the internal carotid plexus. The branches from the ciliary ganglion are motor, sensory and sympathetic, and supply the ciliary body, iris and cornea. Motor fibers for the sphincter pupillae come from the oculomotor, while those supplying the dilator come from the sympathetic.

The sphenopalatine ganglion is made up of two sensory roots from the second division of

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the trifacial, the vidian, which contains a motor and a sympathetic root. The branches from the sphenopalatine supplies the orbit and the peri-orbital structures, the sphenoidal sinus, the superior and middle nasal concha, superior, middle and inferior meatus, and posterior ethmoid cells.

We might continue tracing possible nerve relations until we had woven a network as perplexing as a crystal maze, but this suffices to illustrate the most probable routes by which reflex nerve irritations may reach the eye.

The ophthalmic artery supplies all the structures in the orbit, sends a branch to the nasal cavity, and to the anterior and posterior ethmoidal cells. The venous blood from the nose returns by way of the ethmoidal veins, which empty into the superior ophthalmic vein. The inferior ophthalmic vein receives the venous blood from the turbinates by way of the pterygoid plexus. It then becomes an easy matter for micro-organisms orginating in the nose and its accessory sinuses to reach the eye through the venous channels.

Diseases of the sinuses may affect the orbit and intraocular structures in a number of ways, *viz,* by continuity and contiguity of structure, by lymphatic system and blood current, sensory, motor and sympathetic nerves, and by absorption of infectious material. Reflex symptoms are produced in the eye as the result of pressure or other form of irritation along the course of some of the branches of the trigeminal nerve, or sympathetic nerves, as just pointed out in our review of the anatomy.

Paralysis of motor nerves of the eye are sometimes the result of inflammatory processes in the posterior ethmoid cells and sphenoidal sinus, and as a result we may get limitation of motility, diplopia, ptosis or dilatation of pupil, depending upon the nerve involved.

Displacement of the eyeball is most frequently the result of sinus disease. When coming from the sphenoidal sinus the direction of the displacement is forward; when from the ethmoid the displacement is outward, forward and down; when from the frontal sinus down and slightly forward, and when from the antrum the displacement is upward.

The optic nerve lies in very close relation to the ethmoid and sphenoid cells, and is often encroached upon by extension of inflammation by contiguity of tissue. The pressure produced by the engorgement of surrounding tissues results in choked disk, enlargement of the blind spot, contraction of the visual field, optic neuritis and disturbances of vision, such as asthenopia, amaurosis, amblyopia, etc., also paroxysms of pain in the region of the orbit.

Kyle, in his recent text-book says, "Amblyopia and amaurosis is to be sought in the anatomical surroundings of the optic nerve while in the optic foramen, where pressure may be exerted on the nerve by distention of the veins and sheath." Chemosis, papilledema, ptosis, paralysis of the ocular muscles, and redness of the eyelids form the important signs of that very important disease, cavernous sinus thrombosis, often the result of suppurations in the sphenoidal sinus or posterior ethmoidal cells.

Asthenopia may be produced by disease of the ethmoid cells, maxillary or sphenoidal sinuses. Relief is obtained by applying the proper surgical treatment to these parts.

It is well to have in mind the ocular symptoms which may be expected when occurring as a complication of any of the sinus diseases. For example, supraorbital periostitis and cellulitis; exophthalmus, downward and forward; hyperemia of optic disk, and hazy vitreous would suggest frontal sinusitis. Blepharospasm, lachrymation, purulent dacryocystitis edema of the retrobulbar tissue producing exophthalmus upward, diplopia, etc., would suggest maxillary sinusitis. Exophthalmus, outward, forward and down; asthenopia; diplopia; amaurosis, would lead one to suspect ethmoiditis, especially posterior. Should there be paralysis of the third nerve, of the sixth or second division of the fifth, exophthalmus forward and outward, our attention should at once be drawn to the sphenoidal sinus or posterior ethmoidal cells. These complications, of course, would indicate grave sinus conditions.

Edema of the upper lid is often the first indication of orbital infection from the accessory sinuses. Sometimes diplopia is the first indication of ocular involvement in chronic sinus disease, and is produced by the exophthalmus as a result of the orbital cellulitis or by paralysis of some of the motor nerves supplying the extrinsic muscles of the eye.

It is claimed by some noteworthy authorities that enlargement of the blind spot is an early symptom and one of great diagnostic value in accessory sinus affections, especially when the posterior ethmoidal cells and sphenoidal sinus are involved. I am unable to say from my own experience whether or not this is true, my observation being extremely limited in this particular.

Ocular disturbance may be produced by negative pressure in the sinuses from occlusion of the ostia. This, I believe to be of frequent occurrence when the infundibulum is pressed upon by a hypertrophied middle turbinate or deflected septum.

Often inflammation of the accessory sinuses runs a course which is almost void of symptoms, and this is especially true when the deep seated cavities are concerned. The first symptom observed may be a central scotoma, when the patient seeks relief on account of dimness of vision or complete blindness in one eye, which came on unnoticed.

Many eye symptoms are due to turgescence of the erectile tissue of the nose, namely, scintillating scotoma, edema of the lids, ocular pains, injection of the conjunctiva, lachrymation and photophobia. Many headaches, seemingly of ocular origin, are due to hypertrophy of the middle turbinal. Every oculist can recall many patients who have consulted him for relief from headache, which was brought on or made worse by use of the eyes, and in whieh there had been found no error of refraction. Many such headaches are due to irritation from intranasal pressure, and they may be relieved by correct operative procedure.

The following cases will illustrate some of the ocular symptoms occurring in diseases of the nose and sinuses, with and without any very direct evidence of sinus involvement and in most instances with all subjective symptoms referable to the eye:

Case No. 1.—Mr. N. W., bookkeeper, age 21. History of illness extending over a period of two years, during which time he had suffered from deep seated pain between the eyes, and recently in the eyeballs. He complained of photophobia, tenderness of the eye, lachrymation and dimness of vision of the left eye. The symptoms were exaggerated by close use of the eyes; in fact, all near work had to be abandoned during the twelve months just previous to the time he first came under my observation, November 24, 1914. The patient was generally miserable, depressed, nervous and melancholic. His family was apprehensive of insanity. His temperature had for the last thirty days ranged from 99 to 101. There was no evidence of tuberculosis. He was suffering from insomnia to a marked degree, and the hearing was very much impaired. There was no error of refraction. One year before, he had consulted a specialist in Fort Worth, who attributed his trouble to hypertrophied tonsils and adenoids, and removed them. Not getting relief, the patient consulted another oculist in Fort Worth, who treated him for several weeks and then advised a coast climate. Six months of the Gulf coast gave no relief; *per contra*, he grew steadily worse. Examination of the nose revealed chronic rhinitis with slight purulent discharge coming from under the left middle turbinate, after the tissues had been shrunken. The left middle turbinal was hypertrophied and making pressure over the hiatus. Post rhinoscopic examination disclosed adenoid tissue in both fossae of Rosenmüeller, and a purulent discharge. Transillumination was negative. The left eye was slightly injected. Diagnosis of chronic anterior and posterior ethmoiditis was made, and operation for removal of the middle turbinate and exenteration of the ethmoids advised. November 23rd, operation was done, with removal of polypoid turbinal and as thorough disintegration of the ethmoid cells as possible. The temperature became normal within three days and has remained so. All ocular symptoms cleared up rapidly, and within thirty days the patient resumed his occupation as bookkeeper. The vision before operation was, L. E. 20/40; R. E. 20/20. Thirty days after operation, vision was 20/20 in each eye. The patient has remained in perfect health.

Case No. 2.—Mr. W. W., age 52, lawyer, became ill September 1, 1914, with an attack of grip of moderate severity. During the second week of illness, he had symptoms of mild sinus inflammation affecting both the frontal sinuses and the antra. There was slight nasal discharge during the latter part of the illness, which had cleared up when I first saw him, September 18, and at this time there was nothing to indicate sinus inflammation other than was presented by the orbit and its contents. At the time I was consulted the patient complained of pain in the left eye, of dull aching character, constant, but worse at night, though not very severe. Photophobia was very pronounced, also a constant sense of pressure or fullness in the region of the orbit. There was asthenopia of the affected eye and diplopia, which was very annoying, so much so that the patient kept the left eye closed in order to avoid seeing double. The patient was forced to lay his spectacles aside on account of the left lens pressing against the eye, due to the exophthalmus. All subjective symptoms were referable to the eye. The exophthalmus, which was very apparent, was forward and outward. The conjunctiva was injected, pupil normal in size and in reaction to light. There was a small central ulcer on the left cornea, due to trophic disturbance. Vision was, R. E., 20/20; L. E. 20/40, with correction. Examination of the nose revealed nothing of importance except a slight turgescence of the tissues. Transillumination was negative. There was no discharge, either in the nose or rhino-pharynx.

There was nothing suggestive of sinus inflammation except the eye symptoms above mentioned. Diagnosis of posterior ethmoiditis was made and operation advised. September 20, two days after he came under my oboservation, an operation was done, removing the anterior portion of the middle turbinate and thorough exenteration of the anterior and posterior ethmoid cells. Pus was found in the posterior ethmoid cells. Pain ceased entirely after the third day, exophthalmus was very much reduced and diplopia had gone by the end of the second week after the operation. At the end of one month, vision was 20/20 in each eye, with correction, and the patient had resumed his work as lawyer.

Case No. 3.—School girl, age 16 years. She suffered from almost constant headaches for more than four years, following an injury to the nose. Examination revealed marked deflection of the septum to the left. There was some hypertrophy of the left middle turbinate, and firm pressure. Use of the eyes always made the headache more intense, or would bring on headache in a short time when the patient was comfortable before. The patient had been refracted by very competent oculists repeatedly, and when she came under my observation was wearing colored glasses on account of marked photophobia, which was a constant symptom. Frequently she would have to leave school in the afternoon and spend the remainder of the day in a dark room. She had a small refractive error, no astigmatism. One year ago I removed the anterior portion of the left middle turbinate and did a submucous resection under cocain anesthesia. She has had no headache since two days after the operation, and is entirely relieved of the photophobia. She broke her glasses and is now doing without them.

I could enumerate many similar cases, but these will serve the purpose of demonstrating the point I wish to make.

ABSTRACT OF DISCUSSION.

Dr. Joseph Beck, Chicago, said: A week ago I saw a case of ethmoid sinusitis with vision gone in one eye, and in week vision was lost in the other eye. I did a bilateral operation, with the result that vision returned in the last affected eye. Early operation to remove the pressure is best. It is the pressure that causes most of the trouble.

Dr. R. H. Gough, Fort Worth, said: It was my

intention, in the discussing of this paper, to report at least two of my own cases, one of optic neuritis, resulting in total blindness, and the other a case of orbital abscess which finally recovered. The ruling of the chair that we should not make case reports a part of the discussion of papers, causes me to refrain from a detailed report. I was especially impressed with the doctor's very complete review of the symptomatology in such cases, and the anatomical relations of the accessory sinuses and the orbit with its contents, and, while I do not even try to keep this accurate anatomical knowledge fresh in my mind, I am aware of the value of reviewing the same regularly, in order that one may more accurately interpret these eye symptoms in sinusitis, and thus be enabled to discover early, the possible eye complications, some of which I have found are not uncommon.

Dr. Hartsook, closing, said: Of course, I do not try to cure all of my cases of pain in the eyes by operating upon the sinuses. I find that errors of refraction must be corrected in many cases, where there is involvement of the sinuses, as surgical procedure for correction of the sinusitis will often be very disappointing if an accompanying error of refraction is left uncorrected.

OCULAR SYMPTOMS OF ORGANIC DISEASE; THEIR IMPORTANCE IN DAMAGE SUITS.*

BY

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Many organic diseases, and especially those of the kidneys and nervous system, are rich in eye symptoms. All of us are familiar with the hundreds of eye symtoms caused by diseases of the brain and spinal cord, which may be apparent after the initial organic condition has subsided. In cerebrospinal meningitis there are early eye symptoms, such as swelling of the lids, conjunctivitis, papillitis, etc., but we are more concerned with the atrophy and blindness, or third nerve affections, causing strabismus, or a loss of conjugate action, all of which ensue after the patient is apparently well.

In multiple sclerosis, any portion of the eye may be affected. The extrinsic eye muscles may be involved singly, or there may be complete ophthalmoplegia. Nystagmus is found in 20 per cent of the cases and optic nerve atrophy occurs in 50 per cent. A transient form of blindness is not uncommon.

In locomotor ataxia, the diagnosis is often made from the early ocular symptoms; probably no other nervous disease has so many characteristic eye symptoms.

Spinal myosis, resulting in contraction of the pupils, is present in some cases or there may be inequality in the size of the pupils, making diagnosis reasonably certain, or the pupils may be normal in size, but the Argyl-Robertson pupil may be found in either condition mentioned if tabes is present. Paralysis of accommodation occurs rarely in this disease, but paresis of one or more of the ocular muscles, with diplopia, occurs in 30 per cent of cases. Optic nerve atrophy is present in 35 per cent of all cases. It is an early symptom and may precede the ataxic gait 20 years. It is bilateral, but generally more advanced in one eye than in the other, which probably explains the inequality of the pupils.

Is it not a fact that many patients suffering from injuries, which have resulted in either partial or total loss of vision, when seeking to recover damage from a corporation have had their visual defects ascribed principally to the effects of either the disease already mentioned, or to some other organic disease manifesting eye symptoms, when in fact the patient may not have been at any time a victim of such disease? Then, is it not a fact that some patients upon receiving a minor injury to the eye, while in the employ of a large corporation, do seek a large sum of money, because of either partial or complete loss of vision, which may have existed before the injury or is discovered at the time of the injury, or even after, which may be wholly due to the effects of some organic disease manifesting eye symptoms?

Brain diseases are the most frequent causes of both optic neuritis and optic nerve atrophy. The disease may be focal or diffuse. Optic neuritis due to focal lesions, is usually caused by tumors, but foci of softening abscesses, thrombosis of the sinuses, aneurisms, apoplexies and cysts, may be the pathologic factors. Optic neuritis may be the first and only evidence of the disease. Recurrent, transient loss of vision may be a prominent symptom of brain disease, whether focal or diffuse.

Exudative chorioiditis may offer many difficulties, when trying to determine its cause. We know that many cases are attributed to syphilis, rheumatism, gout, tuberculosis, anaemia and other diseases. Yet there remains a large percentage of cases, in which no general disease can be detected. A noted author tell us that trauma in the form of penetrating wounds, operations or blows, without visible lesion, accounts for many cases. Now, a blow without visible lesion, causing exudative chorioiditis, would probably be denied by a corporation being sued, with this question to decide; the patient with syphilis or other diseases producing chorioditis, would probably contend that he was never affected with such disease. And just here I want to insist that all damage suits for personal injuries should be heard before a jury composed of competent physicians.

Inflammation of the chorioid, if it remains confined to this membrane, produces neither

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external evidence of inflammation nor pain. The eye looks normal externally and the disease is only manifested to the patient through the disturbance in sight, and the ordinary variety of chorioiditis is the non-suppurative or exudative chorioiditis. Opacities are produced ultimately, and atrophy of retina and optic nerve, with partial or total blindness, occurs, except in those cases due to syphilis that have yielded to antisyphilitic treatment.

Suppurative chorioiditis may not cause pain or external evidence of inflammatory reaction, since the retina and chorioid contain no sensory nerves. Moreover, we may find metastatic purulent chorioiditis as a symptom of pyaemia. In puerperal fever, meningitis and particularly cerebrospinal meningitis, in typhoid fever, variola, scarlet fever, anthrax influenza, ulcerative endocarditis, diphtheria, erysipelas and pneumonia, it may occur following metastasis.

The importance of the far reaching influences this disease might have in determining to what extent a subsequent injury to the eye caused impaired, even loss of vision, is readily apparent.

Albuminuric retintis is found in nearly 50 per cent of cases of bright's disease, yet it is frequently the symptom that leads to a correct diagnosis. The loss of vision is usually slow, rarely rapid, complete blindness being seldom observed; and yet complications such as detachment of the retina, hemorrhage into the vitreous humor, hemorrhagic glaucoma and embolism of the central retinal artery, may occur.

Albuminuric retinitis without complications, presents many perplexing problems to the oculist, in the event the patient receives an injury to the eye while suffering from the nephritis, especially if the patient is sueing for damages. The oculist has no easy task to determine which is the greatest cause of loss of vision, the injury or the disease. In nearly all cases the disease as manifested in the eye, is bilateral, while in most eye injuries only one eye is affected. Porter, in four thousand postmortem examinations, has never seen one sided nephritis, and without exception the cases of albuminuric retinitis which he observed, were found in syphilitics. This is a startling statement and should encourage us to become familiar with every phase of eye symptoms as related to organic diseases.

GASTROGEN TABLETS.—These tablets, recommended by the Bristol Myers Co., New York., to be used in connection with its other nostrum, Sal Hepatica, are said to contain pepsin, calcium carbonate, calcium phosphate and "aromatics." As patients who need an antacid do not need pepsin and vice versa the preparation is unscientific and the therapeutic claims made for it unwarranted. Gastrogen tablets were refused recognition by the Council on Pharmacy and Chemistry. (*Jour. A. M. A.*)

SUB-GLOTTIC STRICTURE.*

BY

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The sub-glottic space has had but little attention, in fact, far less than it deserves. Dr. Clinton McSherry, in a paper presented to the Baltimore Clinical Society and published in the *Maryland Medical Journal,* January, 1878, called attention to our lack of reliable information concerning the sub-glottic space in the living subject. At this time the laryngoscope was but little used and understood. He insisted that a careful use of this wonderful instrument be made in every laryngeal case. He belittled in a drastic manner, the opening of the trachea through the neck without first knowing the laryngeal condition, as such a procedure in no wise benefits or prevents the progress of the laryngeal condition. Since his day a wonderful improvement has been made in the laryngoscope and in the technic of its use.

With the invention and perfection of the bronchoscope our knowledge of the trachea, larynx and bronchi, has been revolutionized, but unfortunately little attention has been given the sub-glottic space, the site of the stricture in the case under consideration. Sajous also contended that sufficient attention was not directed to the sub-glottic space, an inherent portion of the larynx. He urged an extended and systematic examination of this space, because stenoses peculiar to this region present features of unusual gravity. Subglottic strictures are most frequently diagnosed syphilitic, yet the administration of potassium iodid greatly increases the dyspnea of such stenoses, and should never be administered in a case presenting dyspnea unless the nonexistence of a syphilitic condition is ascertained by infralaryngoscopic examination.

Massei is quoted as saying that the cause of sub-glottic stricture is due to syphilis, tuberculosis, tumors, rhinoscleroma and foreign bodies, in the order named. Coakley states that abscess of the larynx is quite uncommon, but may be the result of peri-chondritis or breaking down of the gummata or follow the introduction of a foreign body. Loeb, in his work on surgery of the nose, throat and ear, states that cicatricial stenosis of the trachea usually follows syphilitic ulcerations or decubitus from long retained intubation tubes or from ulcerations due to other causes. None of them, so far as I am am able to learn, claims that subglottic stenosis follow laryngeal tuberculosis, *per se.* In a syphilitic patient the ulceration of

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the larynx affords a favorable site for the entrance of tubercle bacilli, thus giving rise to a mixed infection, tuberculosis engrafted upon a syphilitic ulcer.

Dr. Richard Johnson, in the *Boston Medical and Surgical Journal,* August 19, 1909, reports a case of laryngeal stenosis as a post diphtheritic sequela. Dr. Dillon Brown, of New York City, reports one case of laryngeal stenosis in seventy-five intubations for laryngeal diphtheria. Dr. Jennings, of Detroit, with an equally large experience, has never met with a single case, neither has Dr. Shurley, his associate. Gallatti reports one laryngeal stenosis in thirty-one intubations for laryngeal diphtheria; Ranke reports one in many hundred; Hubner, one in two hundred and fifty; Bokai, two in eight hundred; New York Foundling Hospital, six in five hundred; Williard Parker Hospital, eight cases in nine hundred, extending over a six year period.

Dr. John Rogers, in the *American Journal of Medical Sciences,* divides the cause of laryngeal stenosis as follows:

"1. Laryngeal stenoses are of traumatic, operative or pathologic origin.

Following tracheotomy, they may be due to:

(a) Contraction of the posterior soft parts, due to separation of the anterior segments of the rings by the cannula.

(b) Dislocation of the cricoid cartilage forward and downward, especially when the fistula is through or near the tube.

(c) Overriding of the cut edges of the trachea in a too long incision.

(d) Overriding of the cut edge of the trachea when the fistula is to one side of the median line.

(e) Contraction of the trachea around the cannula, due to sloughing of cartilage or rings.

2. Granulations around the canula or intubation tube. This is much less common than believed.

3. Hypertrophic sub-glottic laryngitis, encountered in retained tube cases; mostly diphtheritic.

4. Prolonged and repeated diphtheritic inflammation. Very rare in antitoxin days, although it followed one tube case of one hundred and fifty-one days.

5. Atrophy of laryngeal abductors, from disuse in retained tube and trachea cannula cases.

7. Obturation or compression of the respiratory tract by a tumor.

The case to which I wish to direct your attention, gave the following history when he reported to our office.

Case 1.—About one year before, he was rushed to a local hospital, where a rapid tracheotomy was performed by a confrere, to prevent death. At the time of operation a quantity of pus was liberated by the incision. Probably this came from a peritracheal abscess. Recovery was somewhat slower than was anticipated, although the relief from the distressing dyspenea was gratifying after the introduction of the tracheal cannula. As the days grew into weeks and weeks into months, he became very anxious for relief from his tube life. Unfortunately, because of ill health, the original operator was forced to relinquish the future care of the case. The patient sought relief through the associate of the original operator, but it was not considered advisable to remove the tracheal cannula and close the tracheal wound, as a distressing dyspnea immediately followed the withdrawal of the cannula. The patient being a physician and desirous of resuming the practice of his profession as soon as possible, found this condition very disheartening as well as unsatisfactory. In his quest for relief he came to our office.

After a careful examination we came to the conclusion that there was a sub-glottic stricture. We carefully explained the gravity of the situation to the patient as well as to the assembled family. The many dangers to be encountered in so hazardous an operation were explained. With such an unfavorable outlook the patient left to search for some one who would offer an easier avenue of escape. After several weeks of futile search he returned with the statement that he had consulted many local physicians, as well as some in other towns. I recall particularly the remarks attributed to Dr. W. D. Jones of Dallas, in which he told of the serious and grave condition, giving a very guarded prognosis. He even suggested that the patient go to some of the larger, northern clinical centers, where he would find men more experienced in handling such grave cases. The patient considered this impractical, and Dr. Jones advised him to return to our office. It was upon this suggestion that the patient returned to us. After carefully reviewing to the patient and his family the condition, as well as its gravity, the patient was admitted to the University Hospital for an operation.

Owing to the difficulty of administering an anesthetic through the tracheal wound at the site of the operation, scopolamine and morphine anesthesia was employed. This afforded a certain freedom from the collection of mucous in the trachea, which was greatly appreciated, especially in view of the obstacles encountered and the prolonged efforts required to thoroughly dilate the stricture.

An incision extending from the cricoid cartilage down to the sternum manubri, was made through the skin, exposing the trachea. Several additional rings of the trachea were severed. This exposed a stricture, extending from the upper angle of the old tracheal fistula to the vocal cords, a distance of a little over an inch. It was with the greatest difficulty that this stricture was dilated, as the smallest probe could not be passed. At times we found it necessary to use a small amount of cocaine, to more thoroughly anesthetize the operative field.

The freedom from post-operative emesis was most gratifying, as patient rested well the first night. The largest intubation tube which would pass through the stricture was retained. During the following day this tube was auto-extubated. A Schrotter tube was introduced. This was retained for a few days, then a larger intubation tube introduced. This process was continued until a number thirteen intubation tube was finally introduced.

In cases of intubation the danger to the patient lies in a spasmodic auto-extubation, at a time when it is impossible to promptly reintubate or handle the case as the necessity demands. To guard against such an occurrence we intentionally left a tracheal fistula, which could be used in case of necessity for introduction of tracheal cannula. The interne, Dr. Grisso, was schooled in intubation that he might be competent to reintubate on short notice. The admonition of Dr. Kennefick of the Manhattan Eye, Ear and Nose Hospital, was in mind when this precautionary measure was provided. Dr. Kennefick relates many

recurrent spasmodic auto-extubations, with almost fatal results. Dr. John Rogers, formerly connected with Willard Parker Hospital, in speaking of auto-extubation in laryngeal cases, says it is a most serious complication and that proper supervision may even mean the saving of the patient's life. It was due to his efforts, more than to any other laryngeal operator, that the importance of the proper amount of swelling in intubation tubes was appreciated. He claimed that often the much dreaded and feared auto-extubation was controlled by using a tube with only 1/32 of an inch greater swelling than had previously been employed, and thus a life saved.

The real cause of the auto-extubation is not fully understood, but I believe the explanation offered by Dr. Rogers is good; at least, it covers a large number of cases. He contended that there was an underlying hypertrophic laryngitis, which was the secondary if not the primary, cause of the auto-extubation. The chronically inflamed tissues are irritated by the pressure of the intubation tube; coughing, accompanied by retching, and involuntary expulsive contraction of the pharynx, precedes the auto-extubation. The combination of coughing and efforts to vomit, seems to be the surest way for the patient to expel the tube. Constant vigilance is essential, to prevent one of these frightening auto-extubations at a time when we are unprepared. In handling these cases it is essential to be eternally prepared for any contingency. In time of peace prepare for war.

During the care of this case, auto-extubations were frequent, but less frequent than we had anticipated from a perusal of the literature. We were constantly frightened by its sudden and alarming appearance. We believe the frequency of this condition was controlled, in a measure, by the laryngeal fistula. The danger of auto-extubation was constantly before us, and was frequently explained to all parties concerned. On one occasion, after a frightful experience, a cure was despaired of and a return to tracheal cannula was contemplated. But the patient said that death was preferable to a tube life, so our efforts were renewed.

All tube cases with which we have had experience, are apprehensive as to their ability to breathe without the tube; but when the physiologic fear is appeased and confidence restored, the cases are able to remain extubated for much longer periods than may have been anticipated. As the hour for reintubation draws near, the patient becomes restless. They will experience more discomfort during the last half hour than during all the other time of the extubation.

At regular intervals during the post-operative care of our patient, he was extubated temporarily. At first the tube was only allowed to remain out a few minutes, but the length of time during which he remained extubated was progressively increased. This process of extubation was employed with a view to minimizing the paralysis of the vocal cords and the intrinsic muscles of the larynx. It might be well to add that the patient feared, almost as much as death itself, a permanent aphonia. We found, as we continued to extubate, that there was an audible voice. His voice has improved progressively, thus giving an incentive and the hope of having a useful voice for the practice of his profession.

On the evening of March 22, 1915, he was extubated with the hope that the tube might remain out for twenty-four hours. He had on numbers of previous occasions had the tube out some six to ten hours. To make the procedure as safe as possible, I had him and his wife take a room in the hotel adjoining my room. The tube was auto-extubated. It remained out over night with but little distress. It was my intention to reintubate late the next afternoon, as I was compelled to leave the city. The condition was carefully explained to the patient and his wife. They readily accepted the suggestion of having Dr. Grisso watch him while I was out of town. For two additional nights the tube remained out, thus making sixty hours in all. He tried it one more day, making seventy-two hours. Then he felt safe to go to his home without a tube. He did not have the tube reintroduced for a month, as he suffered little or no inconvenience.

The idea of extubating over night was at the suggestion of Dr. Samuel McCullagh, of Dr. Louis A. Coffin's Clinic, of the Manhattan Eye, Ear and Throat Hospital, and to him we wish to acknowledge due credit for the result obtained.

To date, the patient has survived the ordeal in good shape, has gained greatly in strength, flesh and power of speech.

In the use of an intubation tube of the largest size permitting of introduction, we were gratified to note:

(1) The comparative freedom from discomfort from the continued pressure of the large tube over long periods of time.

(2) The comparative small amount of paresis following the use of such a tube.

(3) The superior results attained in absorption of cicatricial tissue, by the continuous pressure of a large tube.

(4) The improvement in the physical condition of the patient, as contrasted with the debilitated condition of the cannula cases.

(5) The improved morale and contentedness of the patient. Even a hopeful appearance being evident.

We expect to regularly reintubate this

patient, at stated intervals, to prevent a recurrence of the stricture.

ABSTRACT OF DISCUSSION.

Dr. M. P. Schuster, El Paso, said: I recently saw a case of sub-glottic oedema following measles, on which I had to do a tracheotomy. I have seen many cases of chronic thickening of the sub-glottic tissue after measles, in which there was great difficulty in breathing.

Dr. Moore, closing, said: I wish to emphasize the value of examination below the vocal cords, down to the bifurcation, as I believe that many intumescenses of sub-glottic tissue and high tracheal region are overlooked.

HOOKWORM HISTORY SCHEDULES OF TWO PATIENTS TREATED WITH THYMOL.*

BY

A. J. FECHTIG, M. D., Acting Asst. Surgeon, and J. E. WALKER, M. D., Assistant, Hygienic Laboratory, United States Public Health Service.

WILMINGTON, N. C.

Case No. 13.—R. N., from Columbus County. Patient is a white male, 15 years old. Lives on a farm, the house of which is provided with an unscreened, unprotected, surface privy, open in the back. He attends school, seventh grade, but like practically all farm children in this county, he also works on the farm.

Family history.—Both parents are native born. Father, a farmer, is "nervous and in poor health." Eight children in family.

Personal history.—Patient is 15 years old, native born, 4 feet, 7½ inches standing height, weighs 67 pounds. Says he has been "puny" all his life; has had chicken-pox, diphtheria, whooping-cough, tonsilitis; not many coughs and colds; negative for chorea, convulsions, influenza, malaria, measles, mumps, scarlet fever, smallpox, vaccination and typhoid. He denies the use of tobacco and snuff. Has had ground itch every summer as far back as he can recall.

Physical examination.—On entering the hospital July 20, 1914, patient's general appearance is poor; apparent age 11 years (4 years deficit); personal hygiene fair, emaciation slight; head medium in size; hair brunette, oily, smooth, no pediculosis.

Eyebrows fairly well developed; stare weak, pupils normal; reaction to light and distance normal; convergence poor; left external strabismus; sclerae pearly; conjunctivae very pale; eyesight 20/20 in both eyes; eyes negative for glasses, exophthalmos, von Graafe, nystagmus, night blindness, blepharitis and trachoma.

Ears normal in shape, negative as to pain and discharge.

Facial expression anxious and pinched.

Trunk symmetrical, negative as to scoliosis, kyphosis and lordosis. Shoulders drooped; scapulae winged; abdomen protuberant; girth of umbilicum 60 cm.; no hernia.

Arms and legs normal; history of joint pains in knees.

Skin dry, pale, sallow, no jaundice or atrophy, with but little perspiration; no ulcer, scar, scabies, *Tinea*, acne, or *Pediculus vestimenti*.

Edema none.

Muscles flabby; infraspinatus underdeveloped; grip good; right handed; dynamometer not taken.

Thyroid enlarged; cervical, axillary and inguinal glands normal.

Respiratory system.—Speech slow, hesitating, not stuttering. Mouth breathing slight. Nose tallowy, negative as to epistaxis, discharge and obstruction. Tonsils normal; no adenoids.

Chest flat. Respiratory rate 16; chest measures 68 cm. at inspiration and 63 cm. at expiration, giving an expansion of 5 cm.; spirometer not taken. Vocal fremitus, percussion resonance, breath sounds, and whispered voice normal; no rales, bronchitis, hemoptysis, or expectoration.

Circulatory system.—Temperature 37.2° C.; pulse 90; heart normal in size, apex beat diffuse, inside nipple line, sounds normal, no murmur. For blood, see table No. 2.

Digestive system.—Lips pale, no herpes. Tongue pale, not coated or fissured. Teeth normal but uncared for. Gums normal. In appetite he prefers sours to sweets. History of gastric pains; no present epigastric tenderness; no heartburn, nausea, vomiting, hematemesis or eructations. Liver and spleen not palpable.

Stools show ova of *Necator americanus;* negative as to the other parasites.

Nervous system.—Sleeps well, but dreams; no insomnia, somnolence, talking or gritting of teeth. Has headaches but no dizziness. Mental faculties fairly alert. Rather retiring and shy.

Genito-urinary system.—Patient states that he urinates about four times per day, and that up to a year ago he wet the bed; urination is not painful or difficult. Secondary sexual characters (beard, pubic and axillary hair) not yet developed.

Diagnosis.—Uncinariasis.

Treatment.—On the day after entering the patient was given 15 grains of thymol. Seven male and five female hookworms were recovered from the stool. The thymol was repeated on July 30. After this treatment the patient said that he had experienced a burning sensation in the epigastrium after the first capsule of thymol. Fourteen male and fifteen female hookworms were found in the stools.

DOSES OF THYMOL AND NUMBER OF HOOKWORMS COLLECTED IN CASE No. 13.

1914	Grains of Thymol	Hookworms Collected		
		Male	Female	Total
July 21	15	7	5	12
July 30	15	14	15	29
Total	30	21	20	41

TABLE No. 1.

The patient, on July 29, showed an increase of seven pounds in weight. It is difficult to say whether this gain is to be attributed to the few hookworms expelled or to the hospital food, etc. During the interval between treatments the patient was up and followed his own inclinations.

The patient was unexpectedly called home the day after the second treatment, July 31, by his parents,

*Note: The chief object in the publication of these histories is to show the schedule method that has been in use for several years at the United States Marine Hospital, in Wilmington, North Carolina, in taking clinical histories of parasitic infections.

Our schedules consist of a three-page printed sheet of catch words, that represent the characters or symptoms it is desired to observe. These words are "checked" in case of positive findings and crossed out in negative findings. While the resulting diction is not always so euphoneous as in some other plans that are adopted, the schedules have the advantage of greater uniformity and completeness, so that in a large series of cases the separate symptoms can be more easily compared than is usually the result in clinical histories taken by different observers. There is nothing new in principle in the plan, but so far as can be judged from the literature on hookworm disease, its application and details represent several departures from usual procedures. While in charge of the Marine Hospital, at Wilmington, I assigned cases to my different associates in order to test the schedule system rather thoroughly in hookworm infection, and I now propose to publish several of these histories in various medical journals in order to give the system, as applied to hookworm disease, a wider publicity.—C. W. Stiles.

who needed nim in the farm work. Specimen of his stool before leaving still showed hookworm ova. Not sufficient time for further examination was allowed before leaving.

The patient was sent three courses of thymol at intervals of about ten days, with directions for taking at home. The last time, the dose was inereased to 20 grains and specimens obtained after the last two courses both showed hookworm ova, apparently undiminished in number. The question arose as to whether the patient was taking medicine at home. He was written to and advised to return to the hospital if possible. However, he was told that, if he could not arrange to do this, medicine would still be sent to him if he so desired. No reply was received to this.

The above illustrates a case very resistant to treatment, and shows also the difficulties in attempting to effect a complete cure in certain cases. The patient was seen at his home October 12, 1914. His blood had improved, as shown in table 2, but his stool showed hookworm eggs.

BLOOD COUNTS, CASE No. 13.

1914	Total Red Cells	Total White Cells	Hb. (Sahli)	Color Index	Polymorphonuclears			Mononuclears		Transitionals
					Neutro.	Eosino.	Baso.	Small	Large	
July 20	3,368,000	6,750	50	0.74	62.4	7.6	0.0	23.2	4.8	2.0
October 12	4,736,000	5,760	70	0.74	57.0	18.0	0.0	20.0	5.0	0.0

TABLE No. 2.

Case No. 14.—P. G. W. from Columbus County, N. C.

Patient is a white boy 13 years old.

Family history.—A native born farm family, slightly above the average tenant class. Father with a doubtful history of rheumatism. Mother said to have functional heart trouble. One brother died at one year of age of cholera infantum; one older brother, 21 years old, said to be in fair health; one sister, 23 years old, in fair health; two sisters 22 and 20 years old, respectively, said to be in good health.

BLOOD COUNTS, CASE No. 14.

1914	Total Red Cells	Total White Cells	Hb. (Sahli)	Color Index	Polymorphonuclears			Mononuclears		Transitionals
					Neutro.	Eosino.	Baso.	Small	Large	
July 20	5,720,000	6,000	90	0.79	54.4	18.0	0.0	10.4	11.2	6.0
October 12	4,952,000	6,800	97	0.98	49.0	14.0	0.0	25.0	12.0	0.0

TABLE No. 3.

Personal history.—Patient reports fair health, mumps, mild whooping-cough and tonsilitis; negative report on chickenpox, frequent coughs and colds, chorea, convulsions, diphtheria, measles, pneumonia, scarlet fever, smallpox, vaccination, typhoid, tobacco and snuff. Has had ground itch every year from 1908 to 1913; had one course of hookworm treatment in 1912, and he claims he was greatly benefited.

The farm house has a privy.

Physical examination.—July 20, 1914, patient showed fair appearance; apparent age 13 years (no defieit); personal hygiene good; emaciation slight; head medium, hair medium in eolor, slightly oily, slightly rough, abundant; no pediculosis.

Eyebrows poorly developed; stare weak; pupils normal; reaction to light and distance normal; convergence poor, right and left; sclerae and conjunctivae slightly congested, eyes negative for glasses, strabismus, nystagmus, night blindness, blepharitis and trachoma.

Ears normal in shape, hearing good, right and left, negative for pain and discharge.

Facial expression normal.

Trunk symmetrical, except slight scoliosis; no kyphosis or lordosis. Shoulders square, drooped, left lower than right scapulae slightly prominent; abdomen normal in shape (not protuberant), girth at umbilicum 65 cm.; no hernia.

Arms and legs not deformed; no joint pain.

Skin dry, otherwise normal, not pale, sallow, mottled, jaundiced or atrophied; much prespiration, but no night sweat, ulcer, scar, scabies, *Tinea*, acne, or *Pediculus vestimenti*.

Edema under eyes and on legs, not on hands or elsewhere.

Inguinal glands slightly enlarged; thyroid, cervical and axillary glands normal.

Respiratory system.—Speeeh slightly slow, slightly hesitating, slightly drawling, no stuttering. Mouth breathing slight; nose with slightly tallowy skin, but negative for epistaxis, discharge, and obstruction; both tonsils normal, adenoids slight.

Chest funnel shaped;—faint suggestion of Harrison's groove. Respiratory rate 17, normal right and left, no dyspnea; chest measures 76 cm. at inspiration and 68.5 cm. at expiration, giving an expansion of 7.5 cm. Spirometer not taken.

Vocal fermitus, percussion resonance, auscultation, breath sounds and whispered voice normal; no rales, bronehitis, hemcptysis or expectoration.

Circulatory system.—Temperature 37.7° C.; pulse 73, very irregular, misses every fourth beat; blood pressure, diastolic 104, systolic 118. Epigastric pulsations slight, no precordial or jugular pulsations. Heart not enlarged, beat irregular; apex beat diffuse, inside nipple line; sounds muffled, slightly heaving. For blood counts see table No. 3.

Digestive system.—Lips normal, no herpes; tongue pale, slightly coated, not fissured, teeth moderately decayed, uncared for, brushed irregularly. Gums normal. Appetite good, no preference for sours or sweets. Stomach with nausea and vomiting, negative for pain, tenderness, heartburn, hematemesis, and eructations. Bowels regular, except for occasional diarrhoea. Stools show eggs of *Necator americanus*, but negative for other parasites. Liver and spleen not palpable.

Nervous system.—Sleep somewhat restless, with talking in sleep, negative for insomnia, somnolence, dreams and teeth gritting. Slight dizziness, but no headache; a slight suggestion of listlessness and perhaps a trifle dull.

Genito-urinary system.—States that he urinates four or five times per day, urination not painful or difficult, no bedwetting. Pubic and axillary pilosity undeveloped.

Diagnosis.—Uncinariasis.

Treatment.—One routine treatment with thymol was given. Six hookworms (three males, three females) were recovered. Stools were positive six days later. Patient left the hospital before further treatment could be given. Slight, if any, improvement was noticed during the week in the hospital.

Later examination.—Patient was seen at his home October 12, 1914. The heart was clear. For blood counts see table No. 3. He claims to feel improved.

REPORT OF A CASE OF STRONGYLOIDES INTESTINALIS.*

BY
R. C. WHIDDON, M. D.,
GAINESVILLE, TEXAS.

Patient, a male, age 66 years. Family history negative. He had always been healthy until 5 years ago, while living near Oklahoma City, Okla., when he had an acute diarrhea. He stated that he thought at the time the diarrhea was caused from drinking water from an old unused well near where he was working. The diarrhea was not sufficiently severe to cause the patient to go to bed, but came on suddenly and persisted. He consulted a physician after a day or two, but got no relief. After a week or two, to the best of his memory, the stools gradually grew less frequent until he only had 5 to 7 in 24 hours. This number he continued to have, with occasionally an acute exacerbation for a day or two, when he would have from 10 to 15 stools in 24 hours, until he consulted me, September 25, 1915.

At this time he was greatly emaciated, very aenemic, and was in bed. He was having a stool about every 2 hours. The stool was thin, almost colorless and with a fresh meat odor. His temperature was 97.6° F., pulse 110, and he was very weak. He complained of feeling like something was "eating up his insides." The abdomen was very flat and not tender. He stated that he had consulted many physicians and that none of them did him any good, and now he was going to die. He had objected to my coming to see him, but his daughter persuaded him to have one more try of it with a doctor. He stated that no doctor had ever examined his feces. He had been on many diets, but whatever he ate seemed not to influence the number of bowel passages, and he had not had a formed or solid stool in over 5 years.

I secured a specimen of feces before leaving and, taking precaution to keep it warm, took it immediately to Dr. L. W. Kuser, Pathologist to the Gainesville Sanitarium. The first specimen put under the microscope and the first field looked at, contained 3 small, very active snake-looking worms, which Dr. Kuser classified as Strongyloides intestinalis. Later I sent a specimen to Dr. W. H. Moursund, Pathologist to Baylor University, School of Medicine, who concurred in this diagnosis. It might be of interest to note that although no precaution was taken to keep the specimen sent to Dr. Moursund warm, the worms remained alive and actively motile after transit, through the mail from Gainesville to Dallas.

The activity of the worm is striking. In the fresh specimen the movements are quick and constant, consisting of side to side movements of both tail and head, about the center of the body as a pivot. This activity carries the worm over but little space on the slide. There are millions of them in each bowel movement. They are about .4 mm. long and .02 mm. broad. The head is slightly narrower than the body, the broadest portion of the body being slightly nearer the head than the tail. The body tapers gradually into a long sharp tail.

Reviewing what literature I had, I found but little on the subject of treatment. However, thymol was recommended, and I began giving the drug as recommended for hookworm. The patient has gradually improved under this treatment and is now doing work on his farm. I gave the drug twice per week for 4 weeks, and although the patient improved progressively, we could see no dimunition of parasites in the stool, and up to a few weeks ago, although the man had gained 20 pounds in weight and was doing farm labor, the stools contained nearly as many parasites as when first examined. He has been taking thymol weekly since the first 4 weeks. We have examined frequently for other parasites with negative results.

The stools are now "battery," with occasionally a formed stool; but the parasites still persist.

*Submitted for Publication, January 15, 1916.

DEPARTMENT OF EXTENSION

THE ANATOMY OF THE PROSTATE GLAND, AND THE RESULTS OF ITS ENLARGEMENT.

The prostate gland is situated around the neck of the bladder, and is about as large as a horse-chesnut. The gland is tunnelled for the urine to pass through, the passage being called the "prostatic urethra." The prostate secretes or forms a certain amount of mucus, although this mucus is also formed by other glands situated in the lining of the urinary passages near the prostate.

The bladder is drained from its lowest point so that ordinarily all the urine is expelled each time the urine is voided. If, however, the prostate is enlarged, it may alter the shape of the bladder so that the opening in the neck of the bladder is no longer situated at the lowest point, but somewhere up the side of the bladder. This condition interferes with the complete emptying of the bladder, and causes a certain amount of urine to remain in the bladder after the act of voiding. The urine that remains is called residual urine. A person whose bladder shows residual urine is in a serious condition because the residual urine often ferments and putrefies in the bladder, causing any or all of the following symptoms: Cystitis, pus in the urine, frequency of urination, painful urination, fever, constitutional disturbances, loss of sexual power, loss of weight, lack of appetite, and other symptoms of an exhausting disease.

Aside from all these symptoms, due to faulty drainage of the bladder, the prostate may degenerate into a malignant growth or cancer. This is less frequent than the symptoms mentioned above.

As a rule, even the severe cases of enlarged prostate in elderly men are capable of marked improvement if treated properly, especially when the faulty drainage is corrected by surgical operation. In selecting a course of treatment, one should by all means go to a physician bearing a reputation for honesty and competency. It is usually safest to select a physician who has a character and reputation to live up to in the community where he resides. Advertising doctors are almost always frauds, and should be shunned.

"CARDUI: THE STORY OF A NOSTRUM."

In the current issue of *Harper's Weekly* appears an article, under the title quoted above, announced as the first of three to appear on the subject of "Wine of Cardui" and "Black Draught," two nostrums put out by the Chattanooga Medicine Company. These articles are written by a Dr. Bicknell, who is said to have been in the employ of the Chattanooga Medicine Company for some years as their chemist. Certainly the details he gives indicate a familiarity with the business that could be expected only from one who had been employed in some such capacity. The current article traces the growth of the Wine of Cardui business, and illustrations are used to show the evolution of the nostrum label from "Nature's Great Emmenagogue" to "20 Per Cent. Alcohol." While the author denies that the Chattanooga Medicine Company's nostrum will perform the many wonders claimed for it by its manufacturers, he says "there is one miracle that Cardui can perform—a miracle quite as wonderful, perhaps, as the regulation of the menstrual

function; it can make money." According to Bicknell, Wine of Cardui contains blessed thistle and an insignificant amount of black haw. These herbs, says the author, "whatever their life-giving potentialities, are at least conveniently inexpensive." Then follows a computation of the cost of making and marketing a gallon of Wine of Cardui. This shows that the contents of each bottle "cost a trifle over 4 cents." For the bottle, corks, labels, carton, packing case, etc., he computes an amount that makes the cost of a bottle of Wine of Cardui, packed ready for shipment, total a little less than 11 cents. To this he adds the "patent medicine" maker's largest item of expense, advertising, bringing up the total gross cost of the nostrum to a trifle under 26 cents a bottle. It sells for $1.00 a bottle. These statements prepare one for the claim made by Dr. Bicknell that during the past year "the *net profit* of the year's sale of Cardui amounted to $949,200.00! These figures are enlightening. They help one to understand the lavish expenditure of money that followed the filing of the suits by the Chattanooga Medicine Company against *The Journal of the American Medical Association* and its editor. Those engaged in a business whose *net* profits were even one-half million dollars annually are not likely to be overparticular in the methods of defending the business. The fact that the two and a half million dollars, representing the gross sales, based on the Bicknell figures, comes out of the pockets of those who can least afford it, is but an incident in a sordid business.

ALCOHOLIC CONTENT OF SOME PATENT MEDICINES.

The temperance fanatics who may be guilty of the habit of partaking of various "patent medicines" are reminded that the much despised American beer is tame in alcoholic content as compared with the average "patent medicine." The following figures, taken from government statistics, are rather interesting:

	Per Cent Alcohol.
American lager beer	3.8
English ale and porter	5
French claret	8
Rhine wine	8.7
Champagne	10
Sherry	17.5
Electric Brand Bitters	18
Peruna	18
Lydia Pinkham's Vegetable Compound	18
Paine's Celery Compound	19.9
Wine of Cardui	20
Gin	30
Whiskey (American, common)	35
Scotch Whiskey	40
Hall's Great Discovery	43
Brandy	47
Rum	60
Hamlin's Wizard Oil	65

—*The Journal of the Indiana State Medical Association.*

FLIES AND DIARRHEAL DISEASE.

The Bureau of Public Health and Hygiene of the New York Association for Improving the Condition of the Poor, has issued a special publication entitled, "Flies and Diarrheal Disease," descriptive of its three months' study in the homes of over a thousand infants in New York City, on the relation of flies and diarrheal disease. Special attention has been given such influencing factors as dirt and artificial feeding, and their relative importance determined. A full description of the study, with its important conclusions, may be obtained by request from Philip S. Platt, Superintendent of the Bureau, 105 East 22nd St., New York N. Y.

MISCELLANEOUS

SOUTH TEXAS DISTRICT MEDICAL SOCIETY TO MEET.

The 39th semi-annual meeting of the South Texas District Medical Society will be held in Houston, April 6th and 7th.

Several prominent physicians, in and out of Texas, have accepted invitations to participate in the program, as guests of the society, and the meeting promises to be one of unusual interest. Surgeon Jas. Goldberger of the United States Public Health Service, will be a contributor to the Session on Public Health. The subject of his contribution will be, "The Nature and Prevention of Pellagra." He will exhibit slides illustrating the types of skin lesions encountered in his experimental cases of pellagra at Jackson, Miss. Dr. Isadore Dyer, New Orleans, will also contribute to the program of the public health section, with a paper on "The Hospital Care of Venereal Diseases." Dr. W. A. Davis, Secretary of the Texas State Board of Health; Food and Drug Commissioners R. H. Hoffman and E. H. Golaz of Austin, will participate, as invited guests, in the program of the public health section. Visitors who will contribute to the section on medicine and diseases of children, are Dr. John T. Halsey and Dr. Allan C. Eustis of New Orleans; Dr. J. Spencer Davis and Dr. Harry G. Walcott of Dallas, and Dr. G. B. Foscue of Waco. Dr. E. Denegre Martin and Dr. Carroll W. Allen of New Orleans; Dr. Joseph D. Cohn, Corpus Christi; Dr. T. T. Jackson and Dr. Samuel P. Cunningham of San Antonio, will contribute to the surgical section.

Dr. Joseph C. Beck of Chicago, will contribute a paper to the Section on Surgery, on the present status of cancer of the head and neck.

The section on obstetrics and gynecology will be honored with papers from: Dr. H. W. Kostmayer, New Orleans, and Dr. Charles H. Harris, Fort Worth.

The scientific sections will be held in the meeting room of the Harris County Medical Society, third floor, Kress Building.

A public health meeting will be held in the ball room of the Thalian Club, on the night of April 6th, to which the public is invited. At this meeting, Dr. Goldberger will speak on *The Cause and Prevention of Pellagra;* Dr. Isadore Dyer will speak on *The Obligations of the General Public in the Prevention of Disease.* After the public health meeting, a reception and ball will be held in the Club.

Visitors and members will be taken for an automobile ride to points of interest about the city.

Dr. W. F. Thomson, Beaumont, is Secretary of the Society.

PREPAREDNESS.

Up in the National cemetery at Chickamauga are long rows of mute, marble messages, from the Spanish-American war, that tell of a nation's unpreparedness. Thousands of young American volunteers are thus asleep beneath the Georgian sod; not because their red American blood ran in rivulets, down San Juan Hill, but because a great government permitted them to drink polluted water from a Florida swamp. These sons of American mothers were heroes of the hospital cot, not of the bloody battle field. They shed their blood to hungry mosquitoes, malarial ladened, not to the crack of the Krag. Death, unseen, lurked in every soldier's canteen, because officers, skilled in ordinance, looked with scorn upon the test tube that would have revealed an enemy, the strength of which exceeded that of all nations. A call to arms, and our own boys, accoutrements clanking, entrain for a cam-

paign in a tropical land where, even the word, sanitation, is unknown. White, soft-handed, office men, accustomed to all the protection that modern sanitation affords, hurriedly herded into camp, unprotected against disease-bearing insects; on short rations, and with a water supply containing deadly missiles that would make hand grenades look like toy baloons. Would medical officers have an opportunity to vaccinate these boys against smallpox and against typhoid fever? Would they have an opportunity to establish clean supplies of food and water; to supervise the proper disposal of waste; to protect these boys against disease-bearing insects? With certain Cuban experience still more or less fresh in the minds of fortunate survivors, it is quite probable that they would not. As then, the doctor would still be relegated to the rear to receive and treat disease which he might have prevented. Dr. Gorgas and his assistants prepared a safe zone for the canal workers, and the canal was built. Suppose that the United States government had reversed this order; delegated Dr. Gorgas and his assistants to merely treat the sick and injured; would the canal have been built? Rifles, cartridges and sabres do not prepare soldiers for war; soldiers, with rifles, cartridges and sabres do not prepare a country for war. A nation that does not provide protection for the health of its soldiers, is not prepared. A nation that spends more to prevent swine pest than it does to stem the tide of tuberculosis is unprepared to place her men in the field against another nation that considers the health of its subjects less lightly. When an insect that kills fruit trees receives more consideration than one that kills human beings, we are not prepared for war, or peace. When men seek to abolish modern, sanitary, slaughter houses and the protection that meat inspection affords, returning to the unspeakable slaughter pens, the vile odors of which permeated the very heavens; there's a hole in our preparedness policy that needs patching.—*Beaumont Enterprise.*

GETTING TOGETHER.

It is gratifying to note the prevalent spirt of co-operation that exists throughout the medical world. It is fast becoming recognized that the general field of medicine is too comprehensive for any one man to grasp and put into successful practice, therefore its division into specialties such as surgery, internal medicine, genito-urinary and rectal, eye, ear, nose and throat, dentistry, etc. These divisions of the work are of undoubted benefit to both the profession and their patients, and the tendency is for further division. Many pleasing results have come from this plan of specialization, the most important, of course, being more intelligent and efficient service to mankind; but another result which was not at first apparent is now manifest, namely, that of co-operation and team work. Thus it has come to pass that the diagnostician before he can arrive at a diagnosis must have the expert opinion and service, it may be, of several specialists, including that of the dental surgeon; the outcome of this plan being that after the lesions located by one or more of these specialists are cured the patient often needs no further treatment, the infecting focus having been eliminated.

Another gratifying result which springs largely from this co-operative effort is the greater tendency of every branch of the profession to fraternize at their local and State meetings, banquets and the like. As an illustration, the members of the Dallas County Dental Society have by invitation become associate members of the Dallas County Medical Society, and the members of the latter are associate members of the Dallas County Dental Society. The physicians of Dallas, constituting the Dallas County Medical Society, are extending the dentists every consideration and courtesy, and it is having a splendid effect upon the dentists in their relations with each other. This is shown by the fact that the Dallas Dental Society has recently voted to disband and to throw its weight and influence into that of the Dallas County Dental Society. This getting together is the oil which lubricated the engine of progress. By association and contact of physician and dentist, and dentists with each other ambitions will be aroused which now are sleeping, and a better-informed and educated profession will be the result. —*The Texas Dental Journal.* (*Editorial*).

FREE LABORATORY WORK BY THE STATE BOARD OF HEALTH.

The State Bacteriological and Chemical Laboratory is open to any person in Texas who is not in a position to have examinations made by other laboratories.

Care should be exercised in collecting and preparing specimens. Many specimens reach the laboratory in such condition that it is impossible to make an accurate examination. Many packages are mailed in such condition as to be dangerous to those who have to handle them. To mail such packages is a violation of the postal laws. Directions will be furnished anyone requesting information as to the proper manner of collecting specimens and wrapping them.

The following examinations are made:

(1) Throat Cultures for Diphtheria; (2) Sputum for Tuberculosis, Pneumococcus, etc.; (3) Cerebro-Spinal Fluid; (4) Pus and Exudates; (5) Blood for Syphilis, Typhoid and Malaria; (6) Feces for Intestinal Parasites, Hookworms, Tapeworms, etc.; (7) Urine; (8) Water and Sewage for Bacteria; (9) Also Blood of Animals for Anthrax.

The Laboratory manufactures typhoid vaccine and autogenous vaccine, free of cost.

The laboratory is maintained by the State, and its services are free to any citizen.

Address all communications to Dr. G. M. Graham, State Bacteriologist, Austin, Texas.

PYORRHEA.

A case of pyorrhea in which the endameba can be excluded as a causative factor is reported by J. H. Hoxie, Kansas City, Mo. (*Journal A. M. A.*, November 27, 1915). The patient was a high school boy, aged 18, first seen in August, 1912, and observed up to March, 1914. He had been a healthy infant until 3 months of age, when he had a discharging otitis. At the age of 3 years he began to have sore mouth, beginning suddenly and recurring every three weeks. He had had the usual children's diseases also, but was a healthy appearing child generally. The present illness consists in a febrile attack, stomatitis, glossitis or gingivitis (or all three) occurring every fourteen days and lasting from three to five days, ending with the removal of one or more necrotic nodules about an eighth of an inch in diameter. The ears break and discharge at longer intervals. The attack begins with general malaise and fever followed by soreness and swelling of the mouth localizing and forming the necrotic nodule which can be extracted without much pain or leaving a distinct scar. Aside from the recurrent attacks above described the patient, since 1913, has suffered from occasional attacks of pain in the left knee (bursitis) and from abscesses in the anal fold, coincidently with the oral trouble. The focus of his troubles has been in the alveolar processes and the oral mucosa from which the body was infected. Repeated examinations have failed to reveal the ameba and the organisms most constantly found have been a diplostreptococcus and a mold. The case has been resistant to arsenic

(salvarsan, arsacetin and the trioxid) the salicylates and other systemic and local germicides, as well as to vaccines, both autogenous and stock, single as well as mixed. The question is whether we have here to do with an organism with a cycle of from fourteen to seventeen days or a case of temporary immunity. Hoxie is inclined to believe that the organism is one which is ordinarily nonpathogenic but which has become so in the tissues of this particular patient.

THE AMERICAN MEDICAL GOLFING ASSOCIATION.

In accordance with preliminary announcement made in *The Journal of the A. M. A.*, previous to the last A. M. A. convention, the American Medical Golfing Association held its first tournament in San Francisco, June 21, 1915. Arrangements were then made for the organization, which is now complete with the following directors: President, Wendell C. Phillips, New York; vice-president, James Eaves, San Francisco; Secretary-Treasurer, Will Walter, Chicago.

Plans are now being made for the second tournament, to be held in Detroit at the forthcoming A. M. A. convention in June. The Directors have decided to list as charter members all Fellows who shall have enrolled by April 1, 1916.

All Fellows of the A. M. A. who play the game are eligible, and may obtain the desired information from the Secretary-Treasurer, Dr. Will Walter, 122 S. Michigan Boulevard, Chicago.

Members of the British Medical Association have a similar organization for play at their annual meetings, and it is thought that this will add materially to the social interest of the A. M. A., as it has to the B. M. A. conventions.

ERRORS OF THE PHYSICIAN FROM A DENTAL VIEWPOINT.

"The errors of the physician from a dental viewpoint," said Dr. Price Cheaney, a dentist, before the Dallas Medical and Surgical Society, "are yearly growing beautifully less. They can be divided into two classes: errors of commission and errors of omission. Among the errors of commission: It is used to be a frequent thing that a patient would come into a dental office with a broken tooth to be extracted and say, 'Doctor, that wasn't broken by a regular dentist, you know; it was just an ordinary, common doctor.' There are very few accidents of that kind now. In the forty years that I have been looking down in the mouth, I think the most damage done by the physician has been through the use of calomel. I don't think I am overstating the case when I say that I have seen thousands of mouths where fine teeth have been lost as a result of pyorrhoea, directly traceable to inflammatory conditions from ptyalism. During the last two weeks I have seen two such cases, in the last stages of pyorrhoea, as a result of salivation Next in importance, I should say is the administration of tincture of iron without guarding the teeth. A great deal of damage can be done to the structure of the teeth by tincture of iron. That, of course, is being eliminated more and more.

"But of all the errors of which the physician, from a dental viewpoint, is guilty, those of omission are most important. First, they do not seem to recognize the fact that the mouth and the teeth are possibly the greatest single asset in fighting the battle of life and health that a patient has. The mouth is the portal of the digestive tract. It doesn't matter what kind of scientific and delicately adjusted machinery you have in the manufacturing plant, unless the fuel has proper combustion in the engine room, your machinery is not going to do much for you; and unless the mouth and teeth are in a normal, sanitary condition, so that the food leaves the mouth properly prepared for the stomach and in a properly sanitary condition, the strain on the entire organism is going to be so great that in time the entire machine will be affected.

"The physician has only recently begun to realize the part the mouth plays in general septic infection. Ten years ago, in a paper before this society, I made the assertion that it was a source of constant surprise to dentists that physicians who had been careful to remove every germ from their hands and the field of operation, were willing to allow their patients to take food through mouths in many cases worse than sewers. Pyorrhoea alveolaris seems to be the connecting link which has recently, in the last year or two, brought to the attention of the medical profession at large the dangers of sepsis from the mouth. It used to be that we looked to the tonsils almost entirely as the source of infection. In 1910, I reported a case to this society, in which rheumatism had been absolutely cured by treating pyorrhoea. I then made the statement, and I had not drawn the conclusion as a result of inquiry or from deep reading, but as a result of experiments I had been making at that time, that pyorrhoea brought on rheumatism. I had made exhaustive examinations of pyorrhoea secretions, in connection with John M. Trible, and we found that in the secretions from pyorrhoea there were almost invariably present staphylococci, streptococci and diplococci, but we did not recognize the amoeba at that time. We failed to discover the amoeba, owing to the drying of the specimens for the staining process."

DID YOU BITE?

"Do you want five dollars? If so, and if you are a sufficiently prominent physician, the 'patent medicine' interests will gladly send it to you. Possibly it will be for a mail order diagnosis and treatment. For example: You may receive a letter from a lady in some outlying country town who says that she has heard of your skill in treating diseases peculiar to women. She has a daughter who is suffering from dymenorrhea, menorrhagia or what not and she is afraid that the girl will 'go into consumption.' Enclosed please find a money order for five dollars. Will you not kindly send her a prescription (preferably in liquid form) for the purpose of helping her daughter's condition? Of course, diagnosing disease in and prescribing for patients one has never seen will hardly qualify as the scientific practice of medicine. But the 'patent medicine' interests are apparently willing to part with all the five-dollar bills that are necessary in order to obtain these long-distance prescriptions and diagnoses. Possibly, however, a variant is tried. You may be called up by 'phone and a man will tell you that his wife is suffering from some ailment peculiar to her sex and desires to be operated on. What will you charge for the operation? You may mildly suggest that this question cannot intelligently be answered until you have seen the lady and gone into the case thoroughly. Then the gentleman at the other end of the wire will ask you whether it is not a fact that you charge according to the ability of the patient to pay rather than according to the seriousness of the operation. Or possibly the scheme may have yet another angle. If you are a rather well-known internist or a gynecologist of note an attempt may be made to get you to write a prescription containing, as at least one of the ingredients, viburnum prunifolium—a preparation not unknown to the 'patent medicine' world. Many other changes are being rung, for this is a time of stress with 'patent medicine' fakers, and in order to defend their nefarious trade they

are seeking to manufacture evidence of the *argumentum ad hominem* type. Such evidence may be considered valuable in prosecuting libel suits against the medical profession."—*Jour. A. M. A.*, February 19, 1916.

INDUSTRIAL INSURANCE.

"Bills for compulsory health insurance for workers were introduced into the Massachusetts legislature, January 14, and the New York legislature, January 24. These bills, which have been drafted by the American Association for Labor Legislation in co-operation with the special committee appointed by the American Medical Association, will cover any case of sickness or accident not within the scope of the Workmen's Compensation Act, and will apply to manual laborers and to all others earning less than $100 per month. Benefits to insured workers will include medical, surgical and nursing attendance, medicine and surgical supplies, cash benefit for a maximum of twenty-six weeks of the year, and a limited funeral benefit. Local health associations created under the proposed act for the administration of those benefits would be under the joint control of employers and insured employees. The bills as drafted represent the results of a three years' exhaustive study of health insurance by the special committee of the American Association for Labor Legislation. Much of the best informed opinion of the country is in favor of these proposals. The United States Public Health Service, various state departments of health, labor leaders and others strongly advocate health insurance. The introduction of these bills marks the inauguration of a great movement which ought to result in an improvement in the health of the industrial population and improve the conditions for medical service among the wage earners. It is the duty and the privilege of every physician," says *The Journal of the American Medical Association*, "to study this important question and to express his opinions either to the committee appointed by this Association or to the American Association for Labor Legislation."

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1915, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies:"

Calcium Phenolsulphonate, P. W. R.—A non-proprietary brand of calcium phenolsulphonate admitted to New and Nonofficial Remedies. Powers-Weightman-Rosengarter Co., Philadelphia, Pa.

Iron Lactate, Merck.—A non-proprietary brand of ferrous lactate admitted to New and Nonofficial Remedies. Merck & Co., New York.

Sodium Phosphate, Monobasic, Merck.—A non-proprietary brand of sodium acid phosphate admitted to New and Nonofficial Remedies. Merck & Co., New York.

Phloridzin, Merck.—A non-proprietary brand of phloridzin admitted to New and Nonofficial Remedies. Merck & Co., New York.

Sulphanilic Acid, Merck.—A non-proprietary brand of sulphanilic acid admitted to New and Nonofficial Remedies. Merck & Co., New York.

Ergotin, Merck.—A non-proprietary brand of extract of ergot, purified, admitted to New and Nonofficial Remedies. Merck & Co., New York.

Antithyroidin-Moebius Tablets. ¾ gr.—Each tablet contains antithyroidin-Moebius ¼ gr. Merck & Co., New York.

Euquinine Tablets, 2 grs.—Each tablet contains euquinine 2 grains. Merck & Co., New York.

Euquinine Tablets, 5 grs.—Each tablet contains euquinine 5 grains. Merck & Co., New York.

Ferratin Tablets, 7½ grs. Each tablet contains ferratin 7½ grains. Merck & Co., New York.

Stypticin Hypodermic Tablets, ¾ gr.—Each tablet contains stypticin ¾ grain. Merck & Co., New York.

Stypticin Sugar-Coated Tablets, ¾ gr.—Each tablet contains stypticin ¾ grain. Merck & Co., New York.

Stypticin Dental Tablets, ¾ gr.—Each tablet contains stypticin ¾ grain. Merck & Co., New York. (*Jour. A. M. A.*, January 1, 1916.)

Dionin Tablets, ¼ gr.—Each tablet contains dionin ¼ grain. Merck & Co., New York.

Dionin Tablets, 1 gr.—Each tablet contains dionin 1 grain. Merck & Co., New York.

Theophyllin Sodium Acetate Tablets, 0.15 Gm.—Each tablet contains theophyllin sodium acetate 0.15 Gm. Merck & Co., New York.

Triphenin Tablets, 5 gr.—Each tablet contains triphenin 5 grains. Merck & C., New York.

Tubes Tropacocaine Hydrochloride, Sterilized, 1 gr.—Each tube contains tropacocaine hydrochloride, 1 grain. Merck & Co., New York.

Veronal-Sodium Tablets, 5 grs.—Each tablet contains veronal sodium 5 grains. Merck & Co., New York.

Iodipin Tablets, 3 min.—Each tablet contains iodipin 3 minims. Merck & Co., New York.

Apiol-Merck.—A non-proprietary brand complying with the standards for apiol. Merck & Co., New York.

Creosote Carbonate-Merck.—A non-proprietary brand complying with the standards for creosote carbonate. Merck & Co., New York.

Phenolphthalein-Merck. — A non-proprietary brand complying with the standards for phenolphthalein. Merck & Co., New York.

Quinine Tannate-Merck. — A non-proprietary brand complying with the standards for quinine tannate. Merck & Co., New York.

Sodium Nucleinate-Merck.—A non-proprietary brand complying with the standards for sodium nucleate. Merck & Co., New York. (*Jour. A. M. A.*, January 8, 1916.)

Swan's Typhoid Bacterin (No. 44) (Prophylactic).—Marketed in packages (hospital) of thirty-six vials and in packages (board of health) of seventy-two vials. Swan-Myers Co., Indianapolis, Ind. (*Jour. A. M. A.*, January 15, 1916.)

Radio-Rem, Outfit No. 5.—An apparatus designed for the production of radioactive drinking water by the action of radium sulphate contained in terra cotta plates. In consists of two plates contained in 250 c. c. bottles; when the bottles are filled with water the two plates impart about 3.6 microcurie (10,000 Mache units) to 500 c. c. water daily. For action, uses and dosage refer to the article on radium in New and Nonofficial Remedies. Schieffelin & Co., New York. (*Jour. A. M. A.*, January 15, 1916.)

Diphtheria Immunity Test (Schick Test).—This test is intended to determine those persons who have not in their blood an amount of diphtheria antitoxin sufficient to render them immune to diphtheria. The test is of special value for use in institutions and among groups of persons exposed to diphtheria, in order that it may be determined which individuals should be given an immunizing

dose of diphtheria antitoxin. It is also of value in the diagnosis of other conditions simulating diphtheric infections.

Diphtheric Toxin Standardized (Schick Test).—Marketed in sealed capillary tubes each containing a solution of one-fiftieth of a minimal lethal dose for guinea pigs of diphtheria toxin. H. K. Mulford Co., Philadelphia, Pa. (*Jour. A. M. A.*, January 15, 1916.)

Dimazon.—Diacetylaminoazotoluene. An orange colored powder, insoluble in water but soluble in alcohol, chloroform, oils, fats and petrolatum. It does not stain the hands or cloth. It is said to be useful to promote the growth of epithelium in the treatment of burns, wounds, chronic ulcers, etc. Dimazon is marketed as follows:

Dimazon Oil.—2 per cent.

Dimazon Ointment.—2 per cent.

Dimazon Powder.—5 per cent. Heilkraft Medical Co., Boston, Mass. (*Jour. A. M. A.*, January 22, 1916.)

Ichthalbin Tablets, 5 grs.—Each table contains ichtalbin 5 grains. Merck & C., New York.

Triferrin Tablets, 5 grs.—Each tablet contains triferrin 5 grains. Merck & Co., New York.

Betanaphthol Benzoate-Roche.—A non-proprietary brand complying with the standards for betanaphthol benzoate. Hoffmann-LaRoche Chemical Works, New York.

Betain Hydrochloride-Roche.—A non-proprietary brand complying with the standards for betain hydrochloride. Hoffmann-LaRoche Chemical Works, New York. (*Jour. A. M. A.*, January 22, 1916.)

Ergotinine Citrate-Roche.—A non-proprietary brand complying with the standards for ergotinine citrate. Hoffmann-LaRoche Chemical Works, New York.

Homatropine Hydrochloride-Roche.—A non-proprietary brand complying with the standards for homatropine hydrochloride. Hoffmann-LaRoche Chemical Works, New York.

Seiden Peptone-Roche (Silk Peptone).— A non-proprietary brand complying with the standards for silk peptone. Hoffman-LaRoche Chemical Works, New York.

Theobromine and Sodium Acetate-Roche.—A non-proprietary brand complying with the standards for theobromine sodium acetate. Hoffmann-LaRoche Chemical Works, New York. (*Jour. A. M. A.*, January 29, 1916.)

PROPAGANDA FOR REFORM.

Protonuclein and Protonuclein Beta.—Eight years ago the Council on Pharmacy and Chemistry published a painstaking and exhaustive report on Protonuclein and other products of Reed and Carnrick. This report showed conclusively that the whole theory of nuclein therapy was a tissue of speculation, into whose texture are woven only a few slender threads of fact. Now the Council reaffirms its former action with regard to Protonuclein. The objections to Protonuclein apply with equal force to Protonuclein Beta, said to be Protonuclein mixed with equal amounts of nucleoplasm and protoplasm of the spleen. In view of the lack of evidence the claims made for Protonuclein Beta are unwarranted. The Council, therefore, reports that it is ineligible for New and Nonofficial Remedies. (*Jour. A. M. A.*, January 1, 1916.)

The Composition of Liquid Petrolatum.—As naphthene hydrocarbons predominates in Russian crude petroleums and paraffin hydrocarbons in many or most American crude petroleums, it was assumed that the petrolatums derived from these sources differed from each other in like manner. While both the naphthenes and paraffins are chemically inert, some unexplained therapeutic superiority has been asserted to reside in Russian liquid petrolatum. Benjamin T. Brooks, of the Mellon Institute, explains that most so-called "mineral oils" used for therapeutic purposes contain no paraffin hydrocarbons whatever and that, regardless of the source of the crude petroleum, the fraction which constitutes the liquid petrolatum is composed essentially of naphthenes and polynaphthenes. (*Jour. A. M. A.*, January 1, 1916.)

Stuart's Calcium Wafer Compound.—The A. M. A. Chemical Laboratory reports that Stuart's Calcium Wafers Compound, consists essentially of calcium sulphide and aloes or aloin. Like other so-called blood purifiers, it is essentially a cathartic. (*Jour. A. M. A.*, January 1, 1916.)

Hydropsin.—According to the Ernst Bischoff Co., Inc., Hydropsin is the juice of digitalis, squill, European birch, juniper and knot weed, dialyzed and physiologically standardized. The Council on Pharmacy and Chemistry reports that the composition claimed for Hydropsin brands it is an irrational mixture in which potent drugs are combined with, and more or less covered up by, others that are obsolete and inefficient. The name, instead of indicating its composition, suggests diseases in which it may be thoughtlessly and indiscriminately used. The claim that the danger of toxic or cumulative action has been removed, if accepted by physicians, tends to uncritical use with possible disastrous results. (*Jour. A. M. A.*, January 8, 1916.)

Digitalysatum.—Digitalysatum, according to the Ernst Bischoff Co., Inc., is the dialyzed juice of fresh digitalis physiologically standardized and containing 12 per cent alcohol. Sterisol-Digitalysatum appears to be the dialysate without alcohol diluted with equal parts of physiologic salt solution. The preparations are advertised with claims which imply superiority to all other digitalis preparations. The Council on Pharmacy and Chemistry holds that attempts to create the impression that Digitalysatum possesses all the virtues of digitalis without its chief disadvantage are to be condemned as likely to lead to incautious use of the preparation. The Council therefore declared Digitalysatum ineligible for New and Nonofficial Remedies. (*Jour. A. M. A.*, January 8, 1916.)

So-Called Secretin Preparations.—At the request of the Council on Pharmacy and Chemistry Professor A. J. Carlson of the University of Chicago, has studied the action of secretin when administered by mouth or directly into the intestine and also investigated the secretin content of certain alleged secretin preparations. Carlson and his co-workers, like all previous investigators, found that secretin, when given by mouth or introduced even in enormous doses directly into the intestine, is entirely inactive. Further, they were unable to demonstrate the presence of secretin in samples of Secretogen and another supposed secretin preparation (Duodein) bought on the open market, except that one bottle was found which contained a little secretin. Carlson and his co-workers conclude that there is as yet no reliable evidence that lack of secretin is a primary or important factor in any disease and that, should this be established, secretin therapy, to be effective, must be intravenous. The Council endorsed the work of Professor Carlson. (*Jour. A. M. A.*, January 15, 1916.)

Mixed Antityphoid and Antiparatyphoid Inoculation.—The use of any mixed vaccine is to be looked on askance. The simultaneous inoculation against typhoid, paratyphoid A and paratyphoid B needs further study in many directions. Reason and judgment at present would seem to approve the idea

of using a mixed vaccine for the typhoid and paratyphoid infections. If a practical method of using this mixed vaccine can be devised, it seems to promise results. (*Jour. A. M. A.*, January 15, 1916.)

FULTON'S COMPOUNDS.—A "Bulletin" sent out by the promoters of Fulton's Renal Compound and Fulton's Diabetic Compound gives an account of the alleged good results of the treatment in the case of a Mr. J. J. Pennepacker. The columns of a local newspaper announce the amputation of this man's leg for diabetes. (*Jour. A. M. A.*, January 29, 1916.)

STRONTIUM BROMIDE.—The official bromide contains about two-thirds as much bromide as is contained in potassium bromide and about three-fifths as much as that contained in sodium bromide. Hence it may be expected that the bromide action from strontium bromide will be much less than that of either potassium bromide or sodium bromide. (*Jour. A. M. A.*, January 29, 1916.)

STRONTIUM SALICYLATE NOT SUPERIOR TO SODIUM SALICYLATE.—In a series of carefully controlled trials, carried out in the Lakeside Hospital, Cleveland, M. A. Blankenhorn shows that strontium salicylate possesses no advantages over sodium salicylate as regards either therapeutic efficiency or freedom from undesirable by-effects. The salicyl content of strontium salicylate is about four-fifths that of sodium salicylate. This smaller salicylate content may have contributed to the notion that strontium saliclyate is less likely to cause salicylism. This notion may have also arisen from the fact that the more expensive preparations are likely to be given in smaller doses than the cheaper sodium salicylate. That the strontium salt of salicylic acid has no advantages over the sodium salt, has also been pointed out in the report of the Council on Pharmacy and Chemistry on Rheumalgine. (*Jour. A. M. A.*, January 29, 1916.)

LIABILITY OF THE PHYSICIAN BY IMPLIED CONTRACT.

A short while ago the *Journal* treated of the rights and duties of physicians in so far as they were not obliged to undertake to treat any patient if they did not want to; or must do their best if they undertook to do so. Having accepted a call, or agreed to treat a patient, the physician has entered into what is known at law as an implied contract; and the law will require of him that he live up to his part of it or give the patient redress if he does not do so. The law requires of the physician that he will *use* reasonable care, skill and good judgment. *Use* is the essential word, for no matter how much skill and ability the physician may have, let him be the greatest specialist in his line in the world, and if he neglects to use reasonable care, skill and good judgment in treating any single patient, that patient has cause of action against him. The plea of great or pre-eminent ability never excuses the slightest negligence or carelessness or forgetfulness. And this has been the law for at least six thousand years, so you can see it is no new thing. The law does not attach blame or penalty to the physician for a *mistake* in judgment or treatment; it does not hold anyone to be infallible. But it certainly does emphasize the difference between an honest mistake and negligence —and it punishes the latter by admitting recoveries. When a physician undertakes to treat and does treat a patient, he says, in effect, "I am possessed of the amount of skill, knowledge, ability and judgment which is possessed by the average man who practices medicine in my community or in similar communities and under similar circumstances in other parts of the country, and I will faithfully *use* my skill, knowledge, ability and judgment in treating you." If it can be shown that he, in fact, did *not* do what he undertook to do, then he is liable to the other party to the contract, the patient. If he honestly did do what he undertook to do, and the result is nevertheless bad, or unsatisfactory, the law does not hold him liable; for the law contemplates the possibility of poor results in spite of best efforts and does not permit the mere *result* to be considered as indicating negligence. If he does not visit or see the patient often enough to properly guide the treatment, or if he vacates himself without giving the patient a chance to get another doctor, or if he sends another doctor who is not competent or who is drunk or the like, then he himself is liable to the patient; for he has not lived up to his contract. It behooves him to keep careful records of his visits, treatments and the like; for he does not know when he may be called upon to substantiate some time or date or act. A case involving $2,500 award against the physician hinged upon the point as to whether he changed a dressing on a certain Wednesday or on the following Sunday; he could prove it to be the Wednesday and the judgment of the trial court was reversed and he was relieved of the penalty; and this he did from his visit book which he kept himself. Little things make big results; be very careful.—*California State Journal of Medicine.*

DEFENDING THE GREAT AMERICAN FRAUD.

"Most of the fellows and members of the American Medical Association are aware of the fact the Chattanooga Medicine Company and its chief owner, John A. Patten, manufacturers of Wine of Cardui, have sued (1) the American Medical Association and the editor of *The Journal* for $300,000, (2) Dr. Oscar Dowling, President of the Louisiana State Board of Health, for $25,000, and (3) *Harper's Weekly* for $200,000. Comparatively few realize, however, that the 'patent medicine' interests of the country are spending money lavishly in a desperate effort to win a suit on whose outcome, they consider, depends the very life of the nostrum business. We have, at different times, given our readers an insight into some of the methods pursued in this case, especially in connection with the employment of detectives for the apparent purpose of manufacturing 'evidence.' *The Journal of the American Medical Association* calls attention to an interesting article in the current (Oetober 2) issue of *Harper's Weekly*, wherein are described the activities of some of the horde of detectives employed in this case. We suggest that physicians who have the interest of the public health and the medical profession at heart buy a copy of this week's *Harper's*. Under the title, 'Patten in Pink Whiskers,' the story gives in detail the experience of 'Operative No. 48,' a detective who threw up his job in disgust at the work he was expected to do for the 'patent medicine' interests. How the private papers of the secretary of the Limestone County Medical Society were ransacked; how the minutes of that society were purloined and copied; how the Chattanooga pastor was dogged by detectives and private conversations taken down in shorthand by stenographers hidden from view—these are some of the things described by 'Operative No. 48' in the *Harper* article. Read in connection with *The Journal's* articles on the Wine of Cardui case, it gives a very good idea of the methods to which the 'patent medicine' interests will descend in their attempt to discredit the medical profession and to protect their noisome brood.

"Those who in the past have built up huge fortunes by swindling the sick, sense the downfall of their business that is bound to follow the publicity that has been given it by the American Medical

Association and other agencies. Really the Wine of Cardui cases are not simply 'Chattanooga Medicine Company vs. The American Medical Association, Oscar Dowling and *Harper's Weekly;*' they are 'The Great American Fraud vs. The Medical Profession and the Public.'"

LIGHT, NOT LAWS.

The tendency to shoulder the American Medical Association with responsibilities that should be borne by other organizations has long been deprecated by *The Journal* of the Association. Hardly a day passes that a letter is not received, *The Journal* says, suggesting that the American Medical Association should prosecute this, that or the other fraud, or should use its influence to have a special law passed to put some particular swindle out of business. The reply to such suggestions is, naturally, that it is not the province of the American Medical Association either to prosecute frauds or father laws. As a matter of fact there are already in existence not only laws enough and to spare for attacking most of the frauds in medicine, but also the legal machinery to enforce such laws. This machinery will continue to move slowly, spasmodically and inefficiently, until public opinion has been aroused to the way in which people are duped and swindled by frauds of a medical and quasi-medical type; and the public opinion can be aroused only by education. *The Journal's* propaganda against fraud in medicine is wholly educational in character—not punitive.

DELUSIONS OF PERSECUTION.

C. L. Allen, Los Angeles (*Journal A. M. A.*, September 4, 1915), suggests that the origin of delusional ideas of persecution, so common in insanity, is the development of the biologic reaction of fear and associates them with the physical phenomena and changes of emotional states, such as increased secretion of the ductless glands, and altered metabolism. Possibly, he says, the further study of the function of these glands may throw a more definite light on this subject.

A BY-PRODUCT OF THE HARRISON LAW.

The Harrison Narcotic Law has now been in force six months, and some of its by-products are becoming apparent. One of the unexpected developments is the attitude of the osteopaths toward the law. Osteopathy, as is generally known, orginated in the dreams of a country doctor in Missouri about a quarter of a century ago. It is based, according to its founder and prophet, on the following propositions: The human body is a machine; disease is due to the dislocation of some structure in the body; the treatment of any abnormal condition is to find the dislocated structure and restore it to its proper position. None of the statements is true as a generalization, yet each one has in it a grain of truth, just enough to enable the ignorant and enthusiastic disciple to make out a case to a receptive listener. But the real reason for the temporary vogue of osteopathy is the accidental fact that this cult arose just at the time when the advance of scientific knowledge regarding disease was demonstrating the falsity of many of our previous ideas regarding drugs and their value. "The public," says *The Journal of the American Medical Association*, "catching this spirit from the medical profession, began to waver in its allegiance to powders and pills, and so was psychologically receptive to the claim of the osteopath that his 'system' was a drugless one, that drugs were not only of no value in the treatment of disease, but also were responsible for most of the human ills. In addition to osteopathy, a countless succession of other freak sects made capital out of this 'drugless healing' cry. In each state the advocates of osteopathy appeared before the legislature and demanded the passage of a law which would 'recognize osteopathy' as a drugless system of treatment, something entirely apart and distinct from the practice of medicine. This was the basis on which they were given separate laws, boards and standards, and this is the only ground on which they could be so recognized. The Harrison law provides for the registration of physicians, as a means of restricting the use of certain drugs to legitimate purposes. In several states the osteopath has demanded the right to register under this law, regulating the use of drugs which, according to his own teachings, he never uses and does not believe in. 'For,' he says, 'am I not a physician with all the rights and privileges of one?' To the ordinary mind, it would seem clear that the osteopath either is or is not a physician. If he is, then he is subject to the provisions of the Medical Practice Act, and should be required to conform to its educational requirements. If he is not, then he is not qualified to register as a physician or to perform any of the legal functions of a physician, least of all the dispensing or prescribing of powerful drugs, the use of which is directly opposed to osteopathic teachings."

NEWS

Free Clinic at Abilene.—A free clinic has recently been established at Abilene, to be open daily. Every local physician has agreed to devote a certain number of hours each week to the work.—*Fort Worth Star Telegram.*

Sanitary Reports for January.—The Sanitary Reports for January, 1916, show the presence of the following contagious diseases in the State during the month mentioned: Smallpox, 433 cases; scarlet fever, 222 cases; diphtheria, 217; typhoid fever, 41 cases; tuberculosis, 69 cases. The following deaths were reported: Smallpox, 53; scarlet fever, 11; diphtheria, 72; typhoid fever, 56; tuberculosis, 318. Eighteen counties and one municipality failed to report.

Vaccination of School Children Ordered by San Antonio Health Board.—All children who have not been vaccinated will be excluded from the public schools of San Antonio, in compliance with the mandatory order to that effect issued by the board of health at a meeting in February. Schools allowing students to attend who have not been vaccinated are liable to be closed and teachers permitting unvaccinated children in the schools will be liable to arrest, under provisions of the order.—*San Antonio Light.*

Fort Worth Chapter American Red Cross.—The Fort Worth Chapter American Red Cross was organized in February, and the following officers elected: Chairman, Dr. Holman Taylor; vice-chairman, Mrs. W. V. Galbreath; treasurer, Wm. G. Newby; secretary, J. B. Rawlings; executive committee: Dr. Holman Taylor, Rabbi George Fox, Ben F. Keith. Dr. J. J. O'Reilly, Mayor E. T. Tyra, Rt. Rev. Father R. M. Nolan, Rev. C. A. Roth, A. B. Vera, Mrs. Mary Wright, Mrs. Sam Rosen, Rev. H. M. Dobbs, H. N. Fitzgerald, A. L. Shuman, C. H. Bencini, Sam Davidson and W. C. Stripling.

Free Dental Inspection for San Antonio Schools.—Free dental inspection was installed in the San Antonio public schools on February 16th. The work is being done by the San Antonio Dental Society, under the direction of the board of education, and is the consummation of work undertaken by the San Antonio Council of Mothers. Cards

to be taken home will be given the children and these cards will carry suggestions as to whether the children need dental treatment or not. Whether the treatment is given, will rest with the parents of the children. These cards will bear no names; the doctor who makes the inspection will place a number on the card instead of his name. As the work progresses, it is planned to have a free dental clinic at which indigent cases will be treated.—*San Antonio Light.*

Vital Statistics for January, 1916.—The vital statistics report for January, issued by the State Health Department, shows the total number of births reported to be 5,130, out of a population of 4,343,710. The report says that there should have been 10,135 births reported. The total deaths reported were 3,306 instead of 4,452, estimated. Pneumonia led in the causes of death, there being 362 from this cause alone. There were 319 deaths from tuberculosis in all its forms; influenza, 295; Bright's disease, 148; cancer in all forms, 91. There were 502 deaths of children under one year of age. Bexar county leads in longevity, there being four deaths, two at 116, one each at 110 and 107. Webb, Kaufman and Harris counties each reported a death at 105 years. Cameron and Kaufman counties each reported one, and Robertson two, at 102. There were 8 other deaths ranging from 95 to 98 years.

Annual Report of Pure Food and Drug Commissioner.—The annual report of Pure Food and Drug Commissioner, R. H. Hoffman, Jr., was issued the early part of February, for the fiscal year ending August 31, 1915. During this period 3,766 inspections were made, 39 convictions obtained and 102 complaints filed; 1,103 samples of food were analyzed by the department. The report recommends a more rigid law to correct conditions in slaughter houses, and gives the opinion of the department, "That the only method for controlling these places is a more specific law, and every slaughter house not under municipal control should be required to procure a license from the State. Such licenses would be issued only to places coming under a specified sanitary ruling, the license to be revoked if at any time the sanitary conditions and surroundings of the place are of such character as to become dangerous to the health of the public, or to the food prepared therein."

Forty different patent preparations, selling on the market at from 75 cents to $1, the ingredients of which cost only a few cents, are exposed. The report in dealing with what is termed medical imposition, says:

"The sale of patent medicines is undoubtedly on the decrease. After giving millions of hard earned dollars to skillful advertisers the faith of the public in blood purifiers, nerve tonics, consumption cures, soothing syrups, etc., has at last been shaken."—*Waco Times Herald.*

Principal Causes of Deaths in the United States for 1914.—The Bureau of the Census, Department of Commerce, has issued a preliminary report as to the principal causes of deaths in the registration area for 1914. The registration area of the United States contains about two-thirds of the population. More than 30 per cent of the 898,059 deaths reported occurred from one of three causes, namely, heart disease, tuberculosis and pneumonia. More than 60 per cent were due to 11 causes, the three named, together with Bright's disease and nephritis, cancer, diarrhoea and enteritis, apoplexia, arterial disease, diphtheria, diabetes and typhoid fever. The deaths from organic diseases of the heart and endocarditis, number 99,534, or 150.8 per 100,000 population. This is a marked increase over previous reports.

Tuberculosis in its various forms claimed 96,903 victims, of which 84,366 died from tuberculosis of the lungs. This is a decline, probably due to the activities of various societies devoted to the prevention of tuberculosis, and to increased knowledge of hygiene, and preventive medicine. Pneumonia was responsible for 83,804 deaths, or 127 per 100,000 —the lowest rate on record. 67,545 died from Bright's disease and acute nephritis, which is 102.4 per 100,000. Cancer and other malignant tumors, filled 52,420 graves during the year. This is 79.4 per 100,000, and shows substantial increase over previous reports. Apoplexy was the cause of 51,272 deaths, or 77.7 per 100,000. This is a gradual increase over previous reports. Arterial diseases of various kinds—atheroma, aneurism, etc., caused 15,044 deaths, or 22.8 per 100,000. Diphtheria and croup resulted fatally in 11,786 cases, or 17.9 per 100,000, which is a decline over previous reports. Diabetes was the cause of 10,666 deaths, or 16.2 per 100,000. This is a marked increase over early reports. The mortality rate from typhoid fever has shown a gratifying decline since 1900, from 35.9 per 100,000 to 15.4 in 1914, or 57 per cent. Doubtless typhoid vaccine, increased sanitary knowledge and practices, and better health agency activities, account for this reduction.

The principal epidemic maladies of childhood, whooping cough, measles and scarlet fever, were responsible for 15,617 deaths of both adults and children, or 23.7 per 100,000. There were 10,933 suicides, or 16.6 per 100,000 population. Of these, 3,286 accomplished self-destruction by use of fire arms, 3,000 by poison, 1,552 by hanging or strangulation, 1,419 by asphyxia, 658 by the use of knives or other cutting or piercing instruments, 619 by drowning, 225 by jumping from high places, 89 by crushing and 85 by other methods.

SOCIETY NEWS.

EL PASO DISTRICT—No. 1.

Dr. F. P. Miller, El Paso, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W. R. Smith, El Paso, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

El Paso—Dr. C. F. Braden, El Paso; 1st and 3rd Mondays, September to May inclusive.

Reeves-Ward-Pecos—Dr. O. J. Bryan, Pecos.

The El Paso County Medical Society met in El Paso, February 8. Forty-four members were in attendance. Dr. E. J. Cummins, El Paso, was elected to membership. A committee was appointed to perfect the merger of certain medical journals with the *Bulletin* of the El Paso County Medical Society. Dr. Stark read a paper on *Tuberculosis of the Eye, With Report of Three Cases;* one case was exhibited.

The El Paso County Medical Society met February 21. Twenty-six members were in attendance. Dr. G. W. Worthington, Marathon, was elected to membership. The committee on the merger of journals presented a rough draft of the plan. It was referred back to the committee for a more detailed report. The program was as follows: *Treatment of Diphtheria,* Dr. C. H. Mason; *The Quarantine and Reporting of Communicable Diseases,* Dr. J. W. Tappan. Both papers elicited spirited discussions. Mayor Tom Lea was present and actively participated in the program. Other visitors present were, Drs. D. L. Eastland of Waco, W. W. Lynch of Midland, Wm. McLake of Silver City, N. M., and Willis Waite of El Paso.

District Personals.—Mrs. C. F. Braden, El Paso, continues very ill, since her operation several weeks ago.

Dr. and Mrs. C. P. Austin, Little Rock, Arkansas, have moved to El Paso.

Dr. B. M. Worsham, El Paso, was called to Philadelphia in February, to testify in a medico-legal case.

Dr. and Mrs. B. F. Galloway, El Paso, announce the birth of a son on January 20.

Dr. and Mrs. B. F. Stevens, El Paso, have returned from their wedding trip in California.

Dr. and Mrs. J. E. Keltner, El Paso, announce the birth of a daughter on January 31.

Mrs. Cora E. Mengel, wife of Dr. G. H. Mengel of El Paso, died February 5.

Mr. Charles Lemon, formerly *x*-ray operator for the Massachusetts General Hospital of Boston, has moved to El Paso to open a laboratory. He will be associated with Dr. Crouse.

BIG SPRINGS DISTRICT—No. 2.

Dr. N. J. Phenix, Colorado, Councilor.

District Society—Dr. G. T. Hall, Abilene, President; Dr. W R. Smith, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Ector-Midland-Martin-Howard—Dr. W. F. Johnston, Big Springs; 2nd Thursday quarterly.

Fisher-Stonewall—Dr. R. I. Grimes, Sylvester; 1st Tuesday in January and March.

Jones—Dr. A. McK. Jones, Anson; 2nd Tuesday monthly.

Knox-Haskell—Dr. Judd E. Hammond, Munday.

Mitchell—Dr. T. J. Ratliff, Colorado; 2nd Monday January, April, July and October.

Nolan—Dr. A. A. Chapman, Sweetwater.

Scurry-Dickens-Kent—Dr. H. E. Rosser, Snyder; 1st Tuesday in January, April, July and November.

Taylor—Dr. R. P. Glenn, Abilene; 2nd Tuesday monthly.

THE SCURRY-DICKENS-KENT COUNTY MEDICAL SOCIETY reports the following officers elected for 1916: President, Dr. A. O. Scarborough, Snyder; vice-president, Dr. J. T. Whitmore, Snyder; secretary-treasurer, Dr. H. E. Rosser, Snyder; censors, Drs. R. L. Howell, H. E. Rosser and W. H. Morrow; delegate, Dr. W. R. Johnson, Snyder; alternate, Dr. R. L. Howell. The society meets the first Tuesday in January, April, July and November.

PANHANDLE DISTRICT—No. 3.

Dr. C. R. Hartsook, Wichita Falls, Councilor.

District Society—Dr. T. D. Frizzell, Quanah, President; Dr. J. J. Crume, Amarillo, Secretary.

Secretaries of Sections—Surgery, Dr. J. J. Hanna, Quanah; Medicine, Dr. Wade H. Walker, Quanah; Gynecology and Obstetrics, Dr. G. T. Thomas, Amarillo.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Childress—Dr. R. B. Wolford, Childress; 1st Tuesday monthly.

Collingsworth—Dr. H. B. Worley, Wellington; Tuesdays.

Dallam-Hartley-Sherman—Dr. R. L. Owens, Dalhart; 2nd Tuesday.

Donley—Dr. T. H. Ellis, Clarendon; 1st Thursday monthly.

Foard—Dr. R. L. Kincaid, Crowell; 2nd Monday quarterly.

Hale-Swisher—Dr. A. H. Lindsay, Plainview; 2nd Tuesday monthly.

Hall—Dr. W. C. Mayes, Memphis; 2nd Tuesday monthly.

Hardeman—Dr. T. D. Frizzel, Quanah; 2nd Thursday monthly.

Hemphill-Roberts-Lipscomb-Ochiltree—Dr. H. C. Caylor, Canadian; 1st Monday monthly.

Lubbock-Crosby—Dr. J. T. Hutchinson, Lubbock; 1st and 3rd Tuesdays monthly.

Potter—Dr. J. J. Crume, Amarillo; 2nd Monday monthly.

Wichita—Dr. Q. B. Lee, Wichita Falls; 2nd Tuesday monthly.

Wilbarger—Dr. Richard W. Hix, Vernon; 3rd Monday monthly.

THE HEMPHILL-ROBERTS-LIPSCOMB-OCHILTREE COUNTY MEDICAL SOCIETY announces the following officers elected for 1916: President Dr. A. M. Newman, Canadian; vice-president, Dr. John H. Kelly, Miami; secretary-treasurer, Dr. H. C. Caylor, Canadian (re-elected); committee on public health and legislation, Drs. F. D. Teas, E. H. Snyder and M. L. Gunn; delegate, Dr. J. J. Davis, Higgins. The society meets the first Monday of each month.

SAN ANGELO DISTRICT—No. 4.

Dr. S. C. Parsons, San Angelo, Councilor.

District Society.—Dr. J. M. Horn, Brownwood, President; Dr. R. H. Cochran, Coleman, Secretary. Next meeting will be in Brady.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Brown—Dr. J. W. Carson, Brownwood; 2nd Tuesday monthly.

Coleman—Dr. W. M. Strozier, Santa Anna; 1st Thursday monthly.

Lampasas—Dr. J. W. Ellis, Lampasas; 1st Tuesday March, June, September and December.

McCulloch—Dr. J. S. Anderson, Brady; 1st Monday monthly.

Menard-Kimble—Dr. W. M. Fenley, Menard.

Runnels—Dr. E. R. Middleton, Winters; 2nd Thursday monthly.

Tom Green—Dr. G. W. Nibling, San Angelo; Tuesday before full moon.

SAN ANTONIO DISTRICT—No. 5.

Dr. W. A. King, San Antonio, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Atascosa—Dr. W. E. Seale, Charlotte; 2nd Tuesday monthly.

Bexar—Dr. W. H. Hargis, San Antonio; from October to May. 1st Thursday, Section on Eye, Ear, Nose and Throat; 2nd Thursday, Section on Medicine; 3rd Thursday, State Medicine, Public and Personal Hygiene; 4th Thursday, Obstetrics and Gynecology.

Comal—Dr. L. G. Wille, New Braunfels; 2nd Saturday quarterly.

Guadalupe—Dr. A. H. Neighbors, Seguin; 1st Tuesday monthly.

Gonzales—Dr. W. T. Dunning, Gonzales; 1st Monday monthly.

Karnes—Dr. R. C. Youngblood, Falls City; bi-monthly.

Kerr-Kendall-Gillespie-Bandera—Dr. Wm. Lee Secor, Kerrville; 1st Monday alternate months.

La Salle-Frio—Dr. R. L. Graham, Cotulla; meets quarterly.

Medina—Dr. J. H. Fletcher, Hondo; 2nd Wednesday monthly.

Uvalde-Edwards—Dr. S. B. Hudson, Sabinal; 1st Tuesday monthly.

Val Verde—Dr. D. A. York, Del Rio; 1st Monday monthly.

Wilson—Dr. J. E. Sparks, Floresville; quarterly.

CORPUS CHRISTI DISTRICT—No. 6.

Dr. W. N. Wardlaw, Corpus Christi, Councilor.

District Society—Dr. J. A. McIntosh, San Antonio, President; Dr. L. J. Manhoff, Aransas Pass, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bee—Dr. E. P. Cayo, Beeville; Monday quarterly.

Cameron—Dr. C. W. Skipper, Westville; 2nd Wednesday monthly.

Hidalgo—Dr. W. R. Dashiell, Mission; 5th day monthly

Jim Wells—Dr. M. J. Perkins, Alice.

Kleburg—Dr. R. L. Mathews, Kingsville.

Nueces—Dr. A. W. Davisson, Corpus Christi; 1st and 3rd Fridays monthly.

Refugio—Dr. Roy T. Goodwin, Sinton.

San Patricio—Dr. L. J. Manhoff, Aransas Pass.

Webb—Dr. E. H. Sauvignet, Laredo; 1st Wednesday monthly.

AUSTIN DISTRICT—No. 7.

Dr. T. J. Bennett, Austin, Councilor.

District Society—Dr. Z. T. Scott, Austin, President; Dr. W. A. Harper, Austin, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bastrop—Dr. P. Chapman, Smithville; 2nd Tuesday bimonthly.

Burnet—Dr. H. S. Garrett, Bertram.

Caldwell—Dr. L. L. Hewlett, Lockhart; 2nd Tuesday monthly.

Hays—Dr. P. J. Shaver, San Marcos.

Lee—Dr. C. S. Gates, Giddings; 1st Monday in March, June, September and December.

Llano—Dr. C. F. Darnall, Llano; 2nd Tuesday monthly.

San Saba—Dr. C. L. Behrns, Cherokee; 2nd Tuesday each month.

Travis—Dr. Edgar Mathis, Austin; 2nd Thursday monthly.

Williamson—Dr. W. G. Pettus, Georgetown; 2nd Wednesday.

THE TRAVIS COUNTY MEDICAL SOCIETY met February 10, at Austin. Thirty-six members were in attendance. The following visitors were present:

Drs. Kreisle of Austin, Helm, Thomas of Taylor, Kraulik and Corley of Smithville, Worsham of El Paso and Professor L. W. Sackett of the University of Texas. Professor Sackett read a paper, *Psychology in the Medical Schools.* The subject was presented in a clear cut way and was heartily enjoyed by all, and discussed by several. Professor Sackett, in closing the discussion, thanked the society for the privilege of appearing before it and said that he thought the matter of psychology as applied to medicine should be considered more by physicians in general. He also asked that some one discuss the subject from the negative side. Dr. W. Neal Watt responded very vigorously with his views. A motion was carried requesting the paper for publication and it was suggested that the paper be read before other societies over the State and finally before the State Association, by invitation. Prof. Sackett replied that he would accept the invitation and gladly read the paper elsewhere.

Dr. Frank C. Gregg of Manor, then read a paper, *Report of Three Cases of Fracture of the Arm Bones, Involving the Joints.* This paper was accompanied by *x*-ray pictures and was presented in a very strong and able manner. Dr. Gilbert thought that one should be an expert in bone and joint work to treat such cases by the open method; should be scrupulously aseptic, and should be well protected against mal-practice suits by a good liability company. Dr. Scott complimented Dr. Gregg on his treatment of the cases in question by the closed method, as opposed to the open method. He also emphasized the point regarding the time to begin movement of the joint, following fractures in such localities, and said that more harm than good would be caused by too early manipulation; that no movement of the joint should be instituted until after the fourth week. Dr. Thomas of Taylor, spoke of the importance of too tight bandaging of the fractured part. Dr. Murray cited one case similar to the three spoken of by Dr. Gregg.

Drs. Joe Wooten and S. A. Woolsey each reported interesting cases.

It was decided by vote of the society to ask Dr. Edgar L. Gilcreest of Gainesville, to read his paper, *A Lantern Slide Lecture on Experiences in the Turko-Balkan and in the European Wars,* on the night of February 23.

A vote of thanks was extended to Prof. Sackett for his able paper. The meeting then adjourned for lunch.

DEWITT DISTRICT—No. 8.

District Society—Dr. E. A. Malsch, Victoria, President; **Dr. Walter Shropshire, Yoakum, Councilor.** Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Colorado—Dr. W. G. Youens, Colorado; 2nd Wednesday February, April, June, August, October and December.

DeWitt—Dr. B. J. Nowierski, Yorktown; 3rd Wednesday monthly.

Fayette—Dr. C. M. Hoch, LaGrange.

Lavaca—Dr. Walter Shropshire, Yoakum; 2nd Tuesday monthly.

Matagorda—Dr. S. A. Foote, Bay City; 2nd Wednesday monthly.

Victoria-Calhoun—Dr. F. L. Sargeant, Victoria; 20th monthly.

Wharton-Jackson—Dr. W. B. Huey, El Campo; 3rd Friday monthly.

SOUTHERN DISTRICT—No. 9.

Dr. W. W. Ralston, Houston, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Austin—Dr. Otto E. Steck, Bellville; 1st Tuesday quarterly.

Brazos—Dr. R. J. Hunnicutt, Bryan.

Brazoria—Dr. J. D. Motheral, Angleton; 1st Thursday after 1st Monday.

Burleson—Dr. T. L. Goodnight, Caldwell.

Fort Bend—Dr. R. M. Munroe, Richmond.

Galveston—Dr. W. S. Carter, Galveston; last Friday monthly.

Grimes—Dr. E. A. Harris, Navasota; 1st Wednesday monthly.

Harris—Dr. G. C. Lechenger, Houston; every Friday night.

Madison—Dr. J. E. Morris, Madisonville; last Tuesday monthly.

Montgomery—Dr. H. W. Earthman, Conroe; 2nd Monday monthly.

Waller—Dr. R. E. Bing, Waller; 1st Monday quarterly.

Walker—Dr. J. W. Thomason, Huntsville; 2nd Tuesday bi-monthy.

Washington—Dr. R. H. Lenert, Brenham; quarterly.

THE HARRIS COUNTY MEDICAL SOCIETY met February 5th.

Dr. Stokes reported a case of lumbar Pott's disease in a child 3 years old, whose deformity was increasing in spite of the fact that a spinal brace was worn constantly. Albee's technique was used in transplanting a graft from the tibia to the spinous processes of the vertebrae. Convalescence was uncomplicated until about the 65th day when physicial signs of pyothorax began to develop in the right chest. The chest was drained but the patient continued to go down hill until emaciation was very marked. When hope of recovery was about to be abandoned, the patient began to improve markedly; the sinus drainage is diminishing. An *x*-ray picture taken just before improvement began, shows the focus of necrosis in the bodies of two vertebrae, under the graft, from which the pyothorax developed. It also shows the graft in place and doing its work of immobilizing the vertebrae in the affected region. The external lumbar deformity has disappeared.

Dr. Norsworthy called attention to the difficulty of getting the flaps to remain healthy on account of the interference with the circulation brought about by the pressure of the beds used in the post-operative care of these cases, the difficulty remaining despite the fact that all possible precautions are taken to prevent pressure over the wound itself. He thinks the best method is to place the patient face down on a gas pipe frame, the points of support in this way exerting pressure only on the anterior surface of the body, thus allowing the freest possible circulation into the wound area.

Mr. E. E. Sands, the city engineer, presented a paper on *The Problem of Sewage Disposal in Houston.*

He described the different types of disposal plants used by the principal municipalities of Europe and America, showing how they accomplish their purpose, and then went into the theory of the activated sludge method of sewage disposal, which he proposes to instal in Houston.

His paper was profusely illustrated with well made lantern slides. The society unanimously approved the sanitary work of Mr. Sands.

THE HARRIS COUNTY MEDICAL SOCIETY met in Houston, February 12. Dr. Short reported a case of beginning menstruation in a girl seven years of age. Dr. Lechenger reported a case of tuberculous meningitis, complicating a third stage pulmonary tuberculosis in a young man.

Dr. Cooke made the following autopsy report: Negro child, age 18 months, very much emaciated; omental and abdominal fat practically all absorbed; omental glands enlarged; several yellowish patches found on the liver and one on the posterior aspect of the stomach. The right lung was so firmly adherent to the diaphragm that the latter had to be cut away. The whole lung was a mass of tuberculous tissue and had a cavity about the size of a fairly large pecan. The left lung was not so bad as the right, but was also invaded by the process.

Dr. Jno. T. Moore reported the case of a man, aged 63, a saloon keeper, of moderate habits. Who

has suffered with "indigestion" for 13 years. For the last ten years he has had attacks of severe pain in the stomach and gall-bladder regions. For the last two months he has been in bed and for the last two weeks has had a jaundice, which could not be cleared up under ordinary measures. The gall-bladder is palpable and gives the same tactile impression as a sack of marbles. For the past ten years the patient has had trouble in evacuating the bladder, so that while in the hospital it is necessary to use a catheter to withdraw the urine. A diagnosis was made of gall stones, with a possible carcinoma.

Operation was done under local anasthetic. Section of gall-bladder gave the gross appearance of a carcinoma at the junction of the cystic and common ducts.

Dr. Scardino presented a case in which an abortion had been attempted. The woman continued to have cramps and flooding, which the abortionist was unable to control. When called in, Dr. Scardino found the cervix patulous. He tried expectant treatment, keeping the patient in bed for a week. There was some improvement, but the patient began having sudden attacks of severe pain. She was sent to the hospital. The pulse at this time was between 80 and 90 and the temperature was normal. Bimanual examination revealed a mass on the right side, which, on account of the history, was tentatively diagnosed as infection of the fallopian tube. The patient suddenly collapsed, the pulse reaching a rate of 120 to the minute without any rise of temperature. Diagnosis of ectopic pregnancy, was made and verified by operation. The abdomen was found full of blood, with foetus free in the cavity. The tube was clamped, the abdominal cavity cleansed with normal saline the wound closed, and convalescence was uneventful.

Dr. Hodges reported the case of a little child three years of age, who had been placed under the care of a tuberculous grandmother. When the child began to complain of feeling ill a diagnosis of grip was made by the attending physician. Three weeks later the child had large cavities in both lungs, was passing almost pure pus from the bladder, there was a tumor over the kidneys, the temperature varied between 103.5° and 104° F. Death resulted promptly.

Dr. M. E. Taber of Dallas, the essayist of the evening, spoke of certain aspects of the relation between the physicians and the corporations that furnish medical service to their employees. On the whole, he does not approve of contract practice, though there are certain industries, such as railroads, etc., that must have this kind of work. He took occasion to speak against the propaganda of a certain health association, which he said smacks largely of commercialism and which is simply an attempt to form a kind of a medical monopoly. He summed up his remarks by saying that if physicians would make their charges to corporations reasonable, and would remember that a cursory examination is not worth the same fee as a complete examination, the corporations would be more liberal in their payment for medical services.

Dr. Cooke said he knew nothing of the health association to which Dr. Taber referred, but since the workman's compensation act became a law, contract practice for the insurance companies has had a very serious bearing on the medical defense problem of the State Association. Under the present system a patient is forced to go to the company doctor, for whom he may have a very serious dislike. In such a case, if things do not go right, even though the doctor be blameless, the patient can sue and in many cases recover damages from the doctor as well as from the company; whereas, if he were allowed a choice in the matter there could not be any such excuse for going into court. He said he intends to ask, in view of the seriousness of this situation, that the State Association withdraw its legal protection from those who do this kind of practice.

Dr. Knox said the railroads were compelled to adopt the contract system, on account of the large number of employees, and the impossibility of paying such large fees as would necessarily be charged by individual physicians. The men under this system pay a very small fee and are able to get good attention.

Dr. Thorning, speaking of the health associations, said he had seen a number of such schemes tried, but that they had all failed, because it was impossible to get the better class of physicians to stay with them.

Dr. Patterson related some unfortunate experience of his, at the hands of a large corporation He thinks the doctors could kill contract practice by refusing to do it.

Dr. Moore spoke against contract practice and the pernicious influence of the insurance lodges.

Dr. Taber in closing, said we must help the corporations that are helping organized medicine, and that if we are taken advantage of, we are to blame for it.

Dr. Taber was extended a vote of thanks, and confidence in his views.

The Harris County Medical Society met in Houston, February 19. Dr. John T. Moore exhibited a spleen removed from a case of Banti's disease.

Dr. E. L. Gilcreest of Gainesville, read a paper entitled, *Gunshot Wounds Observed in the Late Turko-Balkan and the Present European Wars.* The paper was a discussion of the action of the different missiles used in battle, and how they produce their effects; the different methods of transporting the wounded; their care in the hospitals; the types of wounds dealt with and the treatment used in some of the cases. The paper was well illustrated with lantern slides, a number of *x*-ray pictures were shown. Interesting snapshots of different hospitals and the famous members of their staffs, and a number of interesting souvenirs obtained at the front were shown. He was extended a vote of thanks for the interesting paper.

Dr. Hodges announced the organization of a local chapter of the American Red Cross.

The Harris County Medical Society met in Houston, February 26. Fifty-six members and one visitor were present.

Dr. J. M. Boyles reported the case of a little girl, 11 years of age, who had a triangular growth of mucous membrane between the labia genitalis. The membrane was amputated, and there was no further trouble.

Dr. Norsworthy presented a boy 8 years of age, who a short time after convalescing from an attack of grip, began to complain that his legs felt heavy; as time went on he would stumble in walking, and still later he had a complete paralysis of the lower limbs. This paralysis has been extending up the body until now the child is completely helpless. There has been no rise of temperature until the last few days, but now the child is developing a fever.

Dr. Jno. T. Moore suggested a diagnosis of Landry's paralysis.

Dr. Knox reported the case of a patient, a man, who had been brought in with a diagnosis of appendicitis. He had been running a little temperature for the last 15 or 20 days. On palpating the abdomen a round, easily movable tumor was discovered. The nature of this tumor, as revealed by the external examination, threw some doubt on the original diagnosis. At operation the tumor mass, which was about three inches in diameter, proved

to be the omentum wrapped about an inflamed appendix in such a way that the latter formed the center of the mass. The appendix was removed and the wound closed without drainage. Good recovery.

Dr. Priester reported a case of appendicitis in a negro, in whom following one week of expectant treatment, the symptoms had subsided. Operation revealed a retrocecal appendix, from which the end had sloughed off. There was also a fecal concretion about the size of a kidney bean. The condition rare in negroes. Dr. Mynatt said that in his experience negroes had appendicitis about as frequently as whites.

Dr. Mynatt reported a case of intussusception of the small intestine (about the middle of the ileum) in a child of three years. The diagnosis had been made some thirty hours before operation. The temperature was 101°, pulse rapid, general condition not very good. At operation, about one foot of the small intestine was found to be collapsed, but the intussusception was not found until after the application of hot sponges. The mass was reduced, but as the gut seemed to be in good condition and as the child was thought to be unable to stand a prolonged operation a resection was not done. The patient did well until the next night, when marked tympanites showed that the intussusception had recurred. Death followed in a short time.

Dr. Lancaster reported a case of volvulus, seen with Dr. Pritchett. The patient had been sick about a week, with fever and attacks of vomiting, and pain in the right side. A purgative was given without result. An enema brought about evacuation, but several subsequent enemata failed to have any effect. At first it was thought to be an appendical abscess. At operation a volvulous of the lower part of the large intestine was found. The gut was showing the effect of interrupted circulation but applications of hot sponges soon restored its normal appearance, so that resection was considered unnecessary. Recovery was uneventful.

Dr. George K. Swinburne of New York, was introduced and addressed the society.

Dr. L. C. Hanna announced that the manager of the Union National Bank Building, acting with the consent of the board of directors, had agreed to contribute a percentage of the rents received from doctors in that building to cover the deficiency in the rent fund. Dr. Priester moved that the proposition be accepted and that a vote of thanks be extended to the donor.

Dr. Foster offered a resolution that the society commend the commissioners court of Harris County for its action in appropriating funds for the health survey as outlined by Dr. Covington.

Dr. Norsworthy spoke of the poor manner in which records are kept in local hospitals. He thinks the records, especially those of laboratory and *x*-ray work, should be kept so as to be immediately available, and that the hospitals should co-operate in the matter of interchanging such clinical records, so that the expense of duplicating them whenever the patient happens to go to another hospital, may be saved. He urged that a committee be appointed to look into this matter.

Dr. Cooke said that the work of the Council on Medical Defense could be made much more effective if hospitals kept more careful records.

Dr. Goar thinks the trouble is less with the hospital than the surgeons, who almost never take the time to write up their records, which the hospitals would be glad to preserve if it could get them.

Dr. Red thinks that the hospital has done its whole duty when it has seen to the nursing care of the patient.

Dr. Vanzant thinks *x*-ray pictures (except copies) should be kept in the office of the radiologist.

Dr. Cooke said that Dr. Red did not understand his point of view. He cited a case in which the only evidence for the defense (an *x*-ray plate) had been lost at a local hospital.

The Walker County Medical Society announces the following officers, elected to serve during 1916: President, Dr. Eugene Baylis; vice-president, Dr. A. R. Autrey, Elmina; secretary-treasurer, Dr. J. W. Thomason, Huntsville; censors, Drs. E. L. Angier, W. F. Fowler and O. M. Tinsley; committee on public health and legislation, Drs. Eugene Baylis, A. R. Autrey and M. E. Curtis; delegate, Dr. L. H. Bush; alternate, Dr. A. R. Autrey. The society meets the second Tuesday bi-monthly.

SOUTHEASTERN DISTRICT—No. 10.

Dr. A. R. Sholars, Orange, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Hardin—Dr. Lee Selman, Olive; last Saturday monthly.

Jasper-Newton—Dr. D. McMicken, Kirbyville; 4th Wednesday quarterly.

Jefferson—Dr. B. P. Holland, Beaumont; 1st Monday monthly.

Nacogdoches—Dr. T. J. Blackwell, Nacogdoches; 2nd Wednesday monthly.

Orange—Dr. J. P. Hewson, Orange; 1st Tuesday monthly.

Polk—Dr. T. H. Bates, Camden; 1st Wednesday monthly.

Sabine—Dr. W. T. Arnold, Jr., Hemphill; 2nd Wednesday monthly.

Shelby—Dr. J. H. Windham, Shelbyville; 2nd Tuesday monthly.

EASTERN DISTRICT—No. 11.

Dr. C. C. Nash, Palestine, Councilor.

District Society—Dr. E. B. Parsons, Palestine, President; Dr. E. H. Vaughn, Tyler, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Anderson—Dr. E. B. Parsons, Palestine; every Monday night.

Angelina—Dr. J. C. Van Nuys, Lufkin; 1st Tuesday monthly.

Cherokee—Dr. T. H. Cobble, Rusk; 4th Tuesday monthly.

Freestone—Dr. E. V. Headlee, Teague; 1st Tuesday monthly.

Henderson—Dr. A. H. Easterling, Athens; 1st Mondays.

Houston—Dr. W. W. Latham, Crockett; 2nd Tuesday monthly.

Leon—Dr. D. C. Carrington, Marquez; 1st Tuesday in April; 2nd Tuesday in October.

Panola—Dr. A. M. Baker, Carthage.

Rusk—Dr. W. P. White, Henderson; 2nd Tuesday quarterly.

Smith—Dr. Hubert Ferrell, Tyler; 2nd Tuesday monthly.

Trinity—Dr. W. H. Pope, Jr., Trinity; 3rd Thursday monthly.

The Anderson County Medical Society met December 5, 1915, at Palestine. Nine members were in attendance. The following officers were elected for the current year: President, Dr. R. H. McLeod, Palestine; vice-president, Dr. H. R. Link, Palestine; secretary-treasurer, Dr. E. B. Parsons, Palestine (re-elected); delegate, Dr. R. W. Dunlap, Palestine; alternate, Dr. G. H. Moss, Frankston; censors, Drs. E. W. Link, R. M. Dunn and A. L. Hathcock. The society meets every Monday night.

The Henderson County Medical Society met February 8, at Athens, with several members in attendance. The following officers were elected: President, Dr. B. C. Wallace, La Rue; vice-president, Dr. C. R. Johnson, Athens; secretary-treasurer, Dr. A. H. Easterling, Athens (re-elected). Dr. C. C. Nash, councilor, was present and made a timely and encouraging talk on medical society affairs.

District Personals.—Dr. A. L. Hathcock, Palestine, has gone to Philadelphia for post-graduate work.

Dr. F. N. Haggard, Palestine, has resigned as Assistant Chief Surgeon for the I. & G. N. Railroad and has moved to San Antonio.

Dr. F. M. Logsdon, Palestine, has been appointed Assistant Chief Surgeon for the I. & G. N. Railroad, and Dr. G. W. Wilhite has been appointed House Surgeon.

CENTRAL DISTRICT—No. 12.
Dr. A. C. Scott, Temple, Councilor.

District Society—H. C. Black, President; Dr. H. F. Connally, Waco, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bosque—Dr. C. C. Cate, Morgan; 1st Wednesday.
Bell—Dr. L. R. Talley, Temple; 1st Wednesday quarterly.
Comanche—Dr. Charles Ory, Comanche; 1st Thursday monthly.
Coryell—Dr. E. B. Baker, Gatesville; last Wednesday bi-monthly.
Erath—Dr. E. S. Winters, Dublin; 2nd Wednesday bi-monthly.
Falls—Dr. Aug. Streit, Marlin; 1st and 3rd Mondays.
Hamilton—Dr. J. B. Winn, Hamilton; 2nd Wednesday monthly.
Hill—Dr. J. E. Boyd, Hillsboro; 2nd Friday.
Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.
Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.
Limestone—Dr. M. M. Brown, Mexia; 3rd Thursday bi-monthly.
Milam—Dr. D. E. Munroe, Cameron; 2nd Tuesday bi-monthly.
McLennan—Dr. C. E. Collins, Waco; 1st Tuesday.
Navarro—Dr. E. H. Newton, Corsicana; 1st Monday.
Robertson—Dr. A. J. Sharp, Franklin; 2nd Tuesday bi-monthly.

The Hill County Medical Society met December 11, 1915, at Hillsboro. Twenty-four members were present. Dr. J. P Wier, Covington, was elected to membership. The following officers were elected to serve during 1916: President, Dr. T. E. Hunt; vice-president, Dr. B. C. Smith; secretary-treasurer, Dr. J. E. Boyd (re-elected); delegate, Dr. F. D. Sims; censor, Dr. J. M. Wornel; committee on public health and legislation, Drs. L. F. Shoemaker, J. J. Robert and J. T. Holland. The society discussed plans for handling delinquents, and decided to form an organization similar to the Retail Merchants Association. A committee was appointed to investigate the question and report at the next meeting.

The Johnson County Medical Society met in Cleburne, December 21, 1915. Nineteen members were present. Dr. J. W. Sitton of Alvarado, was elected to membership. The following officers for 1916 were elected: President, Dr. J. M. Stallcup, Bono; first vice-president, Dr. M. Dennis, Cleburne; second vice-president, Dr. J. I. Pearson, Joshua; secretary-treasurer, Dr. C. L. Edgar (re-elected); censor, Dr. C. A. Schultz, Alvarado; delegate, Dr. T. N. Self; alternate, Dr. W. E. Menefee. The society adjourned to the Raymond Hotel, where the annual banquet was held. The members had their wives and sweethearts as guests. Covers were laid for 45.

The Navarro County Medical Society met in Corsicana, February 7. Twenty members were present. The following committee on public health and legislation was appointed: Drs. H. B. Jester, B. F. Houston and S. H. Burnett. A charge of a minimum of one dollar for examining applicants for insurance in the Home Benefit Association, was decided upon.

Dr. J. S. Daniel read a paper, *X-ray Diagnosis*. He outlined the many important uses of the *x*-ray in locating foreign bodies and in diagnosing conditions of the bones, joints, gastro-intestinal tract, chest and kidneys. He showed a large number of skiagraphs illustrating the points brought out in the paper.

Dr. J. E. Kelton reported two cases in a paper on *Sarcoma*. The first was a melanotic sarcoma, occurring in a woman of 32. She was first seen about a year ago, with pigmented mole below the right scapula. Later it became enlarged, and he had excised it freely. It was dark in color, but was not examined microscopically. In August, the patient complained of a lump in the right breast and in a week or two, one in the scalp and then in the right axilla. He excised the tumor in the breast, and the pathologist reported melanotic sarcoma. A complete amputation of breast with muscles and contents of the axilla, was done. The patient became very anemic, other nodules soon appeared, and she died in January of this year. Two weeks before death the patient became totally blind, probably from involvement of the retina. The urine was clear when passed, but on standing turned as black as ink. The second case was lympho-sarcoma. Now the patient has a lump in the left groin the size of a grape fruit, lumps in both breasts, in the neck and in the left lower quadrant of abdomen a large tumor mass can be detected, probably coming from retro-peritoneal lymph glands. The interesting feature of the case is the fact that the swelling of the left leg was the first sign and that before any nodule could be felt anywhere. Another interesting feature was the early involvement of the breast.

Dr. T. A. Miller read an interesting paper on *Pleurisy With Effusion*, and reported a case of apparently complicated grip. The patient was a robust woman and had had severe attacks of grip. When all was going well, the fluid was suddenly detected in the pleural cavity. It increased in amount and soon began to embarrass heart action. He removed one-half gallon of fluid, which slowly re-accumulated. The fluid was clear, straw colored. A von Pirquet's test was negative.

District Personal.—The wife of Dr. Lowery of Peoria, died suddenly on the night of January 2, after retiring in apparent good health.

NORTHWESTERN DISTRICT—No. 13.
Dr. C. B. Williams, Mineral Wells, Councilor.

District Society—Dr. J. H. Eastland, Mineral Wells, President; Dr. R. A. Duncan, Graham, Secretary. Next meeting will be in Seymour, April 11-12, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Baylor—Dr. C. E. Johnson, Seymour; 2nd Tuesday.
Clay—Dr. Albert Greer, Henrietta; 2nd Wednesday.
Eastland—Dr. T. B. Busby, Rising Star; quarterly.
Parker-Palo Pinto—Dr. E. H. Bursey, Weatherford; 2nd Tuesday monthly.
Stephens—Dr. J. H. Ball, Crystal Falls; 1st Tuesday quarterly.
Throckmorton—Dr. D. C. Wylie, Throckmorton.
Young—Dr. W. O. Padgett, Graham; 2nd Tuesday bi-monthly.

The Baylor County Medical Society announces the following officers for 1916: President, Dr. J. F. Bunkley, Seymour; vice-president, Dr. S. W. Pistole, Seymour; secretary-treasurer, Dr. C. E. Johnson, Seymour (re-elected); censors, Drs. J. A. Richardson, C. F. Johnson and J. D. Ratliff; committee on public health and legislation, Drs. C. F. Johnson, J. D. Ratliff and J. D. Bunkley; delegate, Dr. J. T. McLemore, Round Timbers; alternate, Dr. C. E. Johnson. The society meets every second Tuesday.

The Parker-Palo Pinto County Medical Society met February 8, at Weatherford. Sixteen members and six visitors were present. Clinical cases were presented by Drs. H. F. Leach and Phil R. Simmons. A paper, *Lymphatics and Cancer*, was read by Dr. E. H. Bursey. The following officers are announced for 1916: President, Dr. H. F. Leach, Weatherford; vice-president, Dr. R. H. Smith, Palo Pinto; secretary-treasurer, Dr. E. H. Bursey, Weatherford; delegate, Dr. Phil R. Simmons, Weatherford. A banquet was given by Dr. Leach complimentary to the visitors and members.

THE STEPHENS COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. A. J. Evans, Caddo; secretary-treasurer, Dr. J. H. Ball, Crystal Falls (re-elected); delegate, Dr. B. F. Rhodes, Breckenridge; alternate, Dr. J. H. Ball.

NORTHERN DISTRICT—No. 14.

Dr. A. W. Carnes, Hutchins, Councilor.

District Society—Dr. C. R. Johnson, Gainesville, President; Dr. H. L. Moore, Dallas, Secretary.

Secretaries of Sections—Obstetrics and Gynecology, Dr. F. A. Pierce, Dallas; Medicine, Dr. J. D. Burt, Farmersville; Surgery, Dr. J R. Lewis, Gainesville.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Collin—Dr. E. L. Burton, McKinney; 2nd Tuesday.

Cooke—Dr. Julius McIver, Gainesville; 2nd Tuesday.

Dallas—Dr. R. S. Loving, Dallas; 2nd and 4th Thursdays.

Delta—Dr. C. C. Taylor, Cooper; 1st Monday.

Denton—Dr. W. G. Kimbrough, Denton; Tuesday following 1st Monday.

Ellis—Dr. E. F. Gough, Waxahachie; 2nd Tuesday.

Fannin—Dr E. H. H. Foster, Bonham; 2nd Thursday monthly.

Grayson—Dr. Davis Spangler, Sherman; 1st Tuesday.

Hopkins—Dr. T. K. Proctor, Sulphur Springs; 1st Wednesday.

Hunt—Dr. H. M. Bradford, Greenville; 2nd Tuesday.

Kaufman—Dr. B. J. Hubbard, Kaufman; 1st Tuesday, February, April, June, August, October and December.

Lamar—Dr. M. A. Walker, Paris; 1st Thursday.

Montague—Dr. C. F. Young, Bowie; 2nd Tuesday monthly.

Tarrant—Dr. J. J. Richardson, Fort Worth; 1st and 3rd Fridays.

Van Zandt—Dr. D. L. Sanders, Wills Point; 1st Friday.

Wise—Dr. L. H. Reeves, Decatur; 1st Tuesday.

THE DALLAS COUNTY MEDICAL SOCIETY met January 13, at Baylor Medical College. Thirty-five members and four visitors were present. Dr. A. W. Carnes reported a case of pernicious malaria; Dr. Geo. Carlisle, a case of aortic regurgitation; Dr. R. B. McBride, a case of cardio-vascular disease; Dr. A. I. Folsom, a case of obstructive prostatitis in a patient aged 28. Dr. E. W. Loomis, city health officer, read a paper on *Municipal Health Department*, and brought out in a very forceful manner the need of co-operation between the department and the physicians of the county. The paper was discussed at length.

The by-laws were so amended as to provide for a clinic day on every third Thursday, at all the hospitals simultaneously.

The following applications were read and referred to the board of censors: Drs. Geo. W. Howard, J. R. Silverthorn and M. M. Carr. The following were elected to membership: Drs. R. D. Lindley, Minnie L. Maffett, G. A. Riddler, Alfred Jacobi and W. E. Smith. The chairman of the board of censors, Dr. W. T. Baker, asked for the opinion of the society as to the eligibility to membership of a physician engaged in health insurance contract practice. Dr. W. D. Jones moved that the matter be disposed of at once. Dr. Carnes recommended that it be referred to the Grievance Committee. Dr. Baker offered as a substitute motion, that action be deferred until the first meeting in February, allowing time to investigate. Dr. Bruce thought it should be referred to the Grievance Committee. Dr. Turner said it should be in the hands of the Executive Body. Dr. Small favored Dr. Baker's motion, that action be deferred and time given for investigation. Dr. Jones withdrew his motion. Dr. White moved, as a substitute, that the Executive Body investigate and report to the society. Dr. Smart offered as a substitute that the society take up the study and investigation of contract practice in general and the legislation as proposed by the joint committee from the American Medical Association and the American Council of Labor. Dr. Smart's substitute was lost. The substitute motion of Dr. White carried.

Dr. Carlisle, chairman of the auditing committee, reported that the committee had examined the books and accounts of the secretary-treasurer and found them to be correct. The following resolution was offered by Dr. H. Leslie Moore:

> Resolved, that Article V of the constitution and Chapter III of the by-laws, be amended by the following addendum:
>
> "Any officer or committteeman who, without good and sufficient reason, shall absent himself from two successive regular meetings, may be automatically dropped from such position of honor and his successor elected by the society, if the place is elective, or appointed by the President, if otherwise."

THE DALLAS COUNTY MEDICAL SOCIETY met in regular session January 27. Dr. L. F. Bland reported a case of stenosis of the cardiac end of the stomach, with dilatation of the oesaphagus, illustrated by *x*-ray plate.

Dr. W. J. Calvert made a further report on the case of tumor of the hypophysis with acromegalia, which he had shown at the meeting of November 26, 1915. He reported that Dr. Cushing of Baltimore, had removed the tumor, confirming the *x*-ray findings made here.

Dr. J. M. Martin exhibited a skiagrapic plate showing a fence wire staple in the lung.

Dr. J. R. Worley demonstrated a combination restraining and obstetrical harness, devised by himself.

Dr. H. H. Hendricks reported a case of double vagina and uterus.

Dr. Edgar Gilcreest of Gainesville, was the guest of the society and delivered a stereopticon lecture on his experiences in two European wars. A vote of thanks was extended him for his address.

Dr. R. W. Baird read a paper on *Observations Extending Over a Period of Five Years on* 101 *Cases of High Blood Pressure.* Discussion was by Drs. Carlisle, Neel, Carnes, Carrell and Smart.

Dr. W. J. Calvert read a paper on *The Return of Vocal Fermitus After Pleural Effusions*, which dealt especially with the physics of fremitus.

The following were elected to membership: Drs. M. M. Carr, G. W. Howard and J. R. Silverthorn. Dr. W. D. Jones, as chairman of the committee on Medical Defense of the State Association, spoke on the matter of paying the annual dues promptly, stressing the fact that delinquents are not entitled to the support of the State Association in the event of damage suit.

THE LAMAR COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. J. N. Powell, Lake Creek; vice-president, Dr. J. R. Creed, Roxton; secretary-treasurer, Dr. M. A. Walker, Paris; censors, Drs. J. L. Hammond, W. G. McCuistion and J. E. Fuller; committee on public policy and legislation, Drs. T. F. Roberts, T. R. Black, J. E. Fuller, S. H. Grant, W. A. Gatlin and S. A. Warren; entertainment committee, Drs. J. M. Hooks, J. F. Gibson, R. L. Lewis and L. B. Stephens; delegate, Dr. J. D. McMillen; alternate, Dr. J. M. Hooks.

THE TARRANT COUNTY MEDICAL SOCIETY met February 4. Forty-five members were present. A letter from the State Secretary was read, requesting the society to endorse the measure pending in Congress to secure assistance from the Federal Government in caring for the unfortunate tuberculosis patients who have drifted into the Southwestern States. This bill was presented to Congress by the Southwestern Conference on Tuberculosis. The resolution was adopted and the county secretary instructed to write the senators and congressmen from Texas.

The following committees for the ensuing year were appointed: Public Health, Legislative and Legal Enforcement: Drs. Henry B. Trigg, Webb Walker and K. J. Scott; Grievance: Drs. S. A. Woodward, M. L. Talbot and I. L. Van Zandt; Publicity: Drs. L. M. Whitsett, M. E. Gilmore and C. B.

Simmons; Membership: Drs. Frank G. Sanders, J. C. Alexander and T. C. Terrell.

The Board of Censors made a written report regarding charges against a member, which was filed for record.

Dr. K. V. Kibbie brought before the society the subject of bad milk sold in Fort Worth. He said he believed that several recent deaths could be traced to the use of this milk. Dr. Crabb, city milk inspector, had asked Dr. Kibbie to call the attention of the members of the medical society to this serious state of affairs, and asked for the assistance in enforcing the city milk ordinance. There was free discussion on food and dairy inspection by Doctors Terrell, M. L. Talbot, Suggs, Gilmore, Harper and Van Zandt. Dr. Kibbie said that meat is being brought to town and sold on our streets without any restrictions whatsoever, and asked if there could not be some way to force this meat to pass inspection. Drs. Van Zandt and Terrell explained that if the pure food ordinance that has been submitted to the city commissioners be made a law and enforced, it would cover everything. Dr. Harper said a meat inspector had been secured, but the commissioners claimed to have no funds to pay him. He had agreed to work for $125 per month. Dr. Rountree suggested that the commissioners be asked to attend a meeting of the society. Dr. Bond asked whether the city commissioners had ever adopted a recommendation made by the Board of Health. Dr. Harper answered that the commissioners seemed to be willing, but no action had ever been taken. The following motion was adopted: That the city commission be petitioned to appoint a meat inspector, and inasmuch as said meat inspector would be an officer of the law and a member of the police department, he should be appointed even if it is necessary to reduce the number of policemen.

Dr. W. R. Thompson read a paper entitled, *The Blood-Clot Method of Treating Mastoiditis.* The paper was based upon a large number of cases of mastoiditis treated by this method and the results were good in every case where all the necrotic bone could be removed. The patient seems to get well quicker; the painful daily packing of the wound with gauze is eliminated; there is less scarring, as was shown by a patient presented in connection with the paper; the number of infections following the operation are reduced.

Dr. R. B. Sellers said he had operated on three cases of mastoiditis by this method, with perfect results, before he began to limit his practice, and had never changed, although the packing method until recently was recommended and practiced by most of the best operators.

Dr. Joyes thought the method a very good one and that it had its advantages over the packing method, in a selected number of cases.

Dr. Geo. D. Bond read a paper entitled: *A Resume of Twelve and One-Half Years' Experience in the Treatment of Skin Diseases by X-ray.*

The Tarrant County Medical Society held its regular clinical meeting February 18. Dr. J. A. Hammack of Kennedale, presented a young man about 25 years of age, suffering with actinomycosis of the cervical glands. The trouble began last August. There had been some improvement until two months ago, when the condition became suddenly worse. His face and neck were swollen and looked very much like a case of acute poison-oak poisoning. A laboratory examination of the pus from the glands revealed actinomyces. No history or sign of any local infection could be obtained, nor were there any other members of the family affected with this trouble. The live stock on the place was examined, but no trace of the disease was found among them.

The case was discussed by Drs. McCollum, Brannon, Wilson and Will Horn. Dr. Brannon said he had treated a case of actinomycosis a few years ago with spirits of ammonia, that made a complete recovery. Dr. Horn made a supplementary report of a like case of actinomycosis shown at the clinical meeting in November, by Dr. Harris and himself. A recent report was that the patient had entirely recovered. Dr. McCollum believed that so few cases had been reported in the past because physicians had failed to make a correct diagnoses until the microscope became a part of every doctor's office equipment. Dr. S. J. Wilson called attention to the teeth as the most common way in which patients are infected in this disease. Straw is not an unusual source of infection.

Under heroic treatment, with large doses of potassium iodide and copper sulphate, the condition of the patient has steadily improved.

Dr. C. H. McCollum read a clinical report of a case of gastro-intestinal disease, which was discussed by Drs. K. H. Beall, M. L. Talbot, J. A. Gracey and J. H. McLean. Dr. Will Horn read the histories, bedside notes and gave the laboratory findings of four female patients treated by Dr. Harris in the sanitarium. The first was that of a severe burn over the buttocks and posterior surfaces of the thighs. The burned area was badly infected with a virulent form of staphylococcus albus when admitted to the hospital. Within the next few days after admittance she developed a severe case of furunculosis, due to the same organism. Three of the hospital physicians who dressed and cared for the patient all developed furunculosis of the arms and hands. These infections were also due to the staphylococcus albus. A rabbit inoculated with the pus from the boils died in twenty-four hours. An autogenous vaccine was made and the patient was rapidly recovering until a thrombus developed in the left iliac vein near Poupart's ligament. She lived only a few days. The thrombus, together with a piece of the vein, was removed after death, and proved to be a true specimen of a venous thrombosis following infection.

The other three cases reported were thromboses of the left iliac vein, one, following an uterine suspension operation; another, the drainage of a pelvic abscess through the vagina; the third developed after the cauterization of a carcinoma of the cervix. The peculiar feature of the four cases of thrombosis was, that all developed in the left iliac vein of women and about the same time. The cases were discussed by Drs. Van Zandt, McLean, Terrell and Harper.

Drs. Wallace B. Smith and D. J. Saunders were unanimously elected to membership.

Dr. J. H. McLean made his final report as chairman of the finance committee for the entertainment of the State Association last May. There was a balance of $293.94 on hand, which was turned into the treasury of the society to be used as a special entertainment fund.

NORTHEASTERN DISTRICT—No. 15.

Dr. W. H. Blythe, Mt. Pleasant, Councilor.

District Society—Dr. R. Y. Lacy, Pittsburg, President; Dr. J. N. White, Texarkana, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bowie—Dr. E. M. Watts, Texarkana; 4th Friday.
Camp—Dr. R. Y. Lacy, Pittsburg; 1st Wednesday.
Cass—Dr. J. W. Shaddix, Marietta; 1st Wednesday.
Franklin—Dr. Z. C. Fuquay, Mount Vernon; 1st Tuesday.
Gregg—Dr. W. D. Northcutt, Secretary.
Harrison—Dr. J. B. Baldwin, Marshall; 1st Tuesday.
Marion—Dr. S. A. Miller, Jefferson; 1st Thursday monthly.
Morris—Dr. R. C. Farrier, Omaha; 1st Tuesday quarterly.

Titus—Dr. W. H. Blythe, Mount Pleasant; 2nd Tuesday.
Upshur—Dr. B. W. Wood, Gilmer; 2nd Tuesday.
Wood—Dr. V. E. Robbins, Quitman; last Friday monthly.

THE HARRISON COUNTY MEDICAL SOCIETY met February 1, at Marshall. Sixteen members were present. Drs. G. D. Mahon, Jr., of Marshall and C. E. Alexander of Houston, were elected to membership. Dr. W. L. Allison, Fort Worth, was elected an honorary member. Dr. Hargrove, of the board of censors, reported that a corn and bunion doctor had been asked to leave town, and he did as he was told very promptly. There were two papers read and discussed: *Pellagra*, Dr. W. L. Allison; *Hypertrophy of the Prostate*, Dr. G. D. Mahon, Jr.

THE TITUS COUNTY MEDICAL SOCIETY met in Mount Pleasant, February 8, in Dr. Crabtree's office. Members present were: Drs. W. R. K. Johnson, L. M. Tabb, T. S. Grissom, S. R. Crabtree, T. M. Fleming and W. H. Blythe.

Dr. Fleming reported a case of malarial haematuria. The patient early in the fall of 1915, had three or four chills. On December 10, 1915, Dr. Fleming was called to see him. From the time of the first call until the 25th of the same month, the patient did not pass a single drop of urine, either naturally or by catheter. On the 26th, he began to pass a small amount, which increased in quantity and improved in color for several days. On January 2, 1916, he was again attacked with suppression of urine and died two days later.

Dr. Johnson reported a case of pneumonia in which there was suppression of urine for 48 or 50 hours with recovery.

At the January meeting of the society a charge was preferred against a member for non-attendance, as per agreement of the member when reinstated following a previous suspension. The member had fully satisfied the maker of the charge and the charge was withdrawn.

Following a communication from the State Secretary, the secretary was instructed to write congressmen in the interest of H. R. 8352 and S. B. 3202, extending aid to stranger consumptives in the southwest.

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

W. H. HARGIS, President.....San Antonio.
W. H. BLYTHE, Vice-President.....Mt. Pleasant.
H. L. WILDER, Secretary-Treasurer.....Glen Rose.

PRACTICAL SOCIETY WORK.*

BY
J. J. CRUME, M. D.,
AMARILLO, TEXAS.

In preparing this paper I have tried to place myself in the attitude first, the President; second, the Secretary; third, the member who attends the regular meetings and is willing to fill any place on the program assigned him; fourth, the member who usually attends, who does not like to prepare a paper, but prefers discussing one read by some one else, or to quietly sit and listen to what the others have to say; fifth, the indifferent member who is seldom found at the meetings and who feels that there is not sufficient attraction and who, unfortunately, is so egotistical as to think he could learn nothing from association with his fellows, and who does not care to impart what he knows to others; in other words, the unsociable member; sixth, the member who lives at some remote point, which makes it quite a task for him to attend the meetings. Taking into consideration the different classes, or perhaps more particularly the conditions surrounding each class, I hope to offer a few practical suggestions regarding the work.

I consider the selection of officers of paramount importance. The President should be a man of unimpeachable integrity, great personal magnetism, good judgment, keen intuition, who will preside with dignity at *every* meeting, and be fair in his administration.

The Secretary should be the most active man in the society, a zealous worker who is not afraid to attempt anything reasonable imposed upon him, affable and who would rather attend a medical society meeting than a theater.

After the election, the program committee should get busy and formulate a program for the whole year. Great care should be exercised in selecting contributors for the program. Members who are willing to write papers and who will endeavor to present something worth while, should be chosen. We all know that there are some who would rather miss the whole year's meeting than to present a paper. Do not impose such duties upon these members. Give them something to do that will make it pleasant for them and let them begin active work by voluntarily discussing papers, later to be placed on the program to open the discussion on papers presented by others. Be careful not to embarrass the member who is timid; make him feel that his presence is specially desired. A little flattery is sometimes appreciated by men as well as women. In selecting contributors for the program, choose not only from the residents of the town where the meeting is usually held, but honor occasionally those who are from remoter districts. I think this item is too much overlooked. Suggest a subject to be written upon for each essayist on the program, at the same time, if there is some other subject he prefers, allow him the preference. Let him be advised, also, that it is best to refrain from quoting too extensively from text books, confining himself as far as possible to his own experience and observation.

The time allowed for any paper should not exceed ten minutes, nor should any discussion exceed five minutes. It is a great mistake to discuss a paper for twenty or thirty minutes. Two members should be selected at each meeting to discuss each paper on the program for the next regular meeting. They will then have time to prepare something worth listening to, and of which they themselves will be proud.

Three or four times during the year, special guests from outside the county, should be invited to address the society. Invite your dentist to prepare a paper upon a subject of interest to both professions. Invite your school superintendent to make an address on some educational subject. Invite some member of the legal profession to present a paper or address upon some medico legal subject, and invite some of his legal friends to be present. Give your ministers to understand that they are invited to meet with you and enter into the discussions whenever it is their pleasure to do so.

The meeting should be called to order promptly at the hour appointed. Do not say 7:30 and then open at 8:00 or 8:30.

In sending out the programs, a few days prior to the meeting, announce that the meeting will be opened at 7:30 or 8:00, according to the time selected, and insist that the president open on time, allowing a specified length of time for the general business of the meeting, and a specified length of

*Read before the State Association of County Secretaries, Fort Worth, May 6, 1915.

time for the reading and discussion of each paper; say, ten minutes as a maximum for a paper and thirty minutes for its discussion. When that time has elapsed, ask for the next paper, and so on.

Promptly at the time appointed for closing the meeting, let it be adjourned, after which the members may remain and enjoy themselves in social conversation as long as they desire. I consider the social feature of our meetings the best remedy for professional jealousies and the means of creating fraternal feeling among the members. In connection with this social feature, an occasional luncheon is desirable, served after adjournment.

Every effort should be put forth to impress a member who does not attend, that he is doing himself the greatest injustice and depriving himself of an opportunity of learning how to serve his patrons, and that by his absence he is dwarfing his usefulness as a Doctor of Medicine.

CHANGES OF ADDRESS.

Dr. J. H. Mitchell, from Elysian Fields to Pittsburg.
Dr. J. T. Iles, from Remlig to White City.
Dr. J. T. Duncan, from Yoakum to Humble.
Dr. F. M. Barnes, from Bomarton to Orlando, Okla.
Dr. J. D. Hunt, from Hillsboro to Aquilla.
Dr. E. A. Benbow, from Kingsbury to Luling.
Dr. J. W. Harrison, from Columbus to Palacios.
Dr. J. E. Martin, from Bruceville to Eddy.
Dr. W. E. Herrin, from Garland to Vickery.
Dr. J. D. Gray, from Gause to San Gabriel.
Dr. O. J. Colwick, from Cranfills Gap to Dallas.
Dr. A. R. Schreier, from West to Hobson.
Dr. Lena F. Schreier, from West to Hobson.
Dr. R. L. Ramsdell, from San Augustine to Plainview.
Dr. E. H. Inmon, from Lubbock to Tahoka.

DEATHS

Dr. J. M. Nicks of Ranger, died at his home, February 11th. He was born at Duck River, Hickman County, Tennessee, November 21, 1850. When a small child, his parents moved to Missouri, where he lived until he was 21. His preliminary education was obtained at the Lacrosse Academy, Arkansas, and the Sam Houston Normal, Texas, from which latter institution he graduated in 1884. He afterward had one year in the University of Nashville. After this he taught school for 10 years. In 1892 he married Miss Nettie Salisbury of McKinney. He obtained his medical education at the Kentucky School of Medicine, graduating in 1894. He was licensed to practice medicine in 1902, and first practiced in Kennedy during part of 1894, when he removed to Houston county, where he lived until 1896. He then removed to Jacksonville, Brazos County, and remained there for 9 years. On account of his wife's health he was compelled to remove to a higher altitude, locating in Ranger about 10 years ago. He was a member of several medical organizations, including his county society and State Association. He served on one of the district medical examining boards at one time. He was an active member of the Christian Church of Ranger, and a beloved citizen. He was buried by the Masons, and his funeral was one of the largest ever held in Ranger. His wife survives him.

Dr. Howard Miller Lawrence of Longview, died at his home, December 21, 1915. He was born at Mound Prairie, Texas, February 23, 1865 and lived there until the age of 21. He received a high school education, and entered the Louisville Medical College of Kentucky. He graduated from Tulane in 1892. He immediately returned to Longview and began the practice of medicine, which he continued until his health failed in 1910. December 10, 1894, he married Miss Kate May McHaney. He joined the Presbyterian Church in early youth and was an elder at the time of his death. He is survived by his wife, mother, a sister and a brother, Dr. C. W. Lawrence, all of Longview. He was affiliated with organized medicine as as long as he was in active practice.

BOOK NOTES

Diseases of the Nose, Throat and Ear. By William H. Kelson, M. D., B. S., F. R. C. S. (Eng.), Surgeon London Throat Hospital, Golden Square; Hon. Surgeon (In Charge of Throat, Nose and Ear Department), City Dispensary; Lecturer on Diseases of the Ear, Polyclinic. 8vo., cloth, Pp. 270, Oxford University Press, American Branch, 35 West 32nd St., New York. 1915. $3.00.

Dr. Kelson says he has prepared this book more for the general practician and medical student than for the specialist, and therefore does not deal extensively with the highly technical operations on the ear, nose and throat, but elaborates more on the procedures that the general practician usually undertakes. He has left to more pretentious works the handling of such diseases and operations as the physician would pass on to the specialist. For this reason but small space is given to diseases of the internal ear, and mastoid and sinus work, while the medical treatment, diagnosis and minor surgical cases are all well covered.

The book is elegantly illustrated, and in the main is well written; but to one who has kept abreast of the times with reference to the treatment of chronic hypertrophied tonsils, the advice given seems rather ludicrous. For instance, to say that enlarged tonsils and adenoids need not be removed in every case, but that the patient may be sent to the sea side and take breathing exercises; that a tonsil may be gradually removed by means of a punch forcep under cocaine anesthesia; that tonsilotomy should be performed in an adult, and that tonsilectomy only seems to be superseding tonsilotomy, does not seem to be quite up to the most accepted thought of the times. Some of us live quite a distance from the sea side, and could not ask our patients to undergo that expensive experiment, to see if they can get rid of such an offensive thing as a diseased tonsil. Aside from this, however, the book is well worth the price asked.

Collected Papers of the Mayo Clinics: Rochester, Minn. Edited by M. H. Mellish. Volume VI. Cloth, 8vo., pp. 814, profusely illustrated. Printed on glazed paper. W. B. Saunders Company, Philadelphia and London. 1915.

Thirty-one prominent and successful members of the medical profession have contributed comprehensive article on diseases and surgery of the Alimentary Canal, Urogenital Organs, Ductless Glands, Head, Trunk and Extremities, Technic, General Papers on Studies on the Etiology of Cancer and the Cancer Problem.

Rochester has become a sort of Mecca to many, and the importance to which it has risen in the realm of medicine and surgery has given to its scientific utterances a corresponding weight, analysis of which shows that its reputation has been built up by the two-fold process of doing the work and of advising the outside world of the fact. However, the volume under consideration is of much value to the "submerged" practician, bringing to his humble cottage the technic of advancing medicine and surgery, both of the clinics and the laboratories. But why should not the greater centers of Texas and the great southwest take this cue, and establish "clinics" also? We have seen both medical and surgical clinics at San Antonio, Houston, Galveston,

Dallas and Fort Worth, which easily rivalled those of which we have these glowing medical rescripts. Nor would we suggest this as a criticism of our brethern to the north of us, but rather to suggest an emulation of their methods.

TRANSACTIONS OF THE COLLEGE OF PHYSICIANS of Philadelphia. Third Series; Volume Thirty-Sixth. 8vo., cloth, pages 388, illustrated. Printed by Dornan (Printer), for the College and "published in part by the income from the Frances Houston Wyeth Fund," 1914, at Philadelphia.

"Notice" by the editor, Walter G. Elmer, M. D., says, "The present volume of *Transactions* consists of the papers read before the College from January, 1914, to December, 1914." From the list of officers and standing committees it passes to the list of the presidents of the College from the date of institution; then the roster of its Fellows, Associate Fellows and Corresponding Fellows, to December, and the list of its Fellows who died during the year 1914, then follow twenty-three papers, just such as one would expect from so erudite a body of scientists, including memoirs of those who died during the year, and written by such men as Drs. Henry, Lewis, DaCosta, E. B. Miegs and Stelwagon, in memory of S. Weir Mitchell, Morris Lonstreth, Joseph Scribner Gibb, William R. Bullock, Sherborne W. Dougherty and Charles H. Reed, Fellows; and John Hughlings Jackson, Oliver F. Wadsworth and Phillip Henry Pye-Smith.

The College was organized A. D. 1787, and its first president was John Redman, who held the office until 1805, when he was succeeded by William Shippen and in turn, through the years by an unexcelled array of the venerated, as the later decades produced them. Men of other days, mostly dead now, we can scarcely think of them in terms mortal!

The volume is a valuable contribution to the late medical literature, with the spirit and genius of which it comports in freshness and vigor of scientific data and original research.

MANUAL OF EMBRYOLOGY. By A. Melville Paterson, M. D., F. R. C. S., Professor of Anatomy in the University of Liverpool; Member of the Institute of American Anatomists; Past-President of the Anatomical Society of Great Britain and Ireland, Etc. Cloth-boards, 12mo., 391 pages, nonpariel, leaded, illustrated with 304 black-and-white and colors. Oxford University Press, American Branch, 35 West 32nd Street, New York. 1915. $2.75.

The text of this very excellent little book is the result of lectures and demonstrations before the medical students of the University of Liverpool. The author is convinced that the best manner of studying anatomy and embryology is in the light of the comparative study of these branches. He declares that the "development of the notochord becomes plain when studied in the lower forms," and has constructed his book along lines consistent with his views on the subject. Dividing his text into two parts, and eleven chapters, he takes up General Embryology, treating of germinal elements, impregnation, formation of germinal area, changes in the germinal layers, formation of the embryo and foetal membranes and placenta; in part two, organogeny is discussed in six chapters on the nervous system and organs of sense, alimentary system, respiratory system, vascular system, lymphatic system and spleen, genito-urinary organs, skeleton, joints, muscles and serous cavities. A copious cross index closes the volume.

Reference to "Book-Notes" in the JOURNAL for several years past, shows this to be the only book on Embryology which has been noticed and leads us to remark that, if we are to take this as a criterion, the subject has been neglected of late beyond what is to be expected of a branch of such value in the study and practice of medical science. We commend this book to the notice of both medical schools and physicians in general.

TREATMENT OF THE ACUTE INFECTIOUS DISEASES. By Frank Sherman Meara, M. D., Ph. D., Professor of Therapeutics in the Cornell University Medical College in New York City; Attending Physician to Bellevue Hospital, New York; Consulting Physician to the Mountain-Side Hospital, Montclaire, N. J., and to the Morristown Memorial Hospital, Morristown, N. J.; Associate Attending Physician to St. Luke's Hospital, New York. Cloth-Boards, 8vo., 540 pages, nonpareil, leaded. MacMillan Company, New York. 1916.

In thirty-five chapters the author has taken up and discussed some practically, some academically, of course, and ably, many of the acute infectious diseases. The author is a man of many activities in his chosen field of teaching, practice and writing. The first chapter, on febrile conditions, and the second, on diet in acute infectious diseases, are exceedingly profitable reading, notwithstanding the prevalent excellent literature on the subjects. Under "acute rheumatic fever" he declares that " 'specific' treatment comes to connote the treatment of one disease alone, syphilis," when, in fact, since the signal failure of the rosy claims of Ehrlich and others, for salvarsan and neo-salvarsan as a cure for syphilis, that disease has fallen back into the list of diseases *without specifics*. While he ignores, in this assertion, the unfailing specific action of quinine on the parasite of malaria, or ipecac in amoebic dysentery, etc., etc., the author recognizes the values of vaccines and serums, and all orthodox therapy.

COLON HYGIENE. By J. H. Kellog, M. D., LL. D., Superintendent of the Battle Creek Sanitarium; Author of "Neurasthenia, Its Causes and Cure," "Rational Hydrotherapy," "The Art of Massage," "Light Therapeutics," etc. Cloth, 12mo., pages 393, agate, illustrated. Good Health Publishing Co., Battle Creek, Mich. 1915.

The author writes well upon his theme, but his relation to a sanitarium the chief efforts of whose management is to push their special foods before the people, the reader is almost irresistibly forced to conclude that he is reading an advertisement. Where it is possible to waive this impression the book is both instructive and entertaining. Much of the best data is to be found within its pages. In the preface we are told that "the chief purpose of this work is to present in a popular way these new facts and the practical results to which they have led." The book is worthy of careful perusal.

BOOKS RECEIVED.

The Practice of Obstetrics, *Cragin*. (Lea & Febiger).

Physicial Diagnosis, 2nd Ed., *DaCosta*. (W. B. Saunders).

Cancer of the Stomach, *Smith-Oschner*. (W. B. Saunders).

Sexual Impotence, 5th Ed., *Vecki*. (Saunders).

Pellagra, 2nd Ed., *Niles*. (W. B. Saunders).

Text-Book of Gynecology, *Gardiner*.

Autoplastic Bone Surgery, *Davison and Smith*. (Lea & Febiger).

Infant Feeding, *Royster*. (C. V. Mosby).

Diagnostim Methods, *Brooks*. (C. V. Mosby).

Candy Medication, *Fantus*. (C. V. Mosby).

Clinics of John B. Murphy, February, 1916. (W. B. Saunders).

Texas State Journal of Medicine

HOLMAN TAYLOR, EDITOR-IN-CHIEF.
EDITORIAL OFFICE: Texas State Bank Building, Fort Worth, Texas.

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Contributions to the JOURNAL *must* be typewritten, on one side of the paper only, doubled spaced and with ample margin. This for facility in editing and to obviate error.

VOL. XI. APRIL, 1916 No. 12

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH OF TEXAS

ANNUAL SESSION
Galveston, May 9th, 10th, 11th

THE PROGRAM FOR THE GALVESTON SESSION.

According to custom, the program for the forthcoming annual session appears in full in this number of the JOURNAL. Those of our readers who may be interested, will find in its proper order, an illustrated account of the attractions of the city of Galveston; a full list of officers and committees, having to do with the session in question; announcement pertaining to the procedure necessary to register and get located; a schedule of the social events for the three days, both for members and visiting ladies; the public health meeting; railroad rates; hotels and hotel rates, and the program for the various section meetings, the memorial exercises and the several general meetings scheduled for the session.

The city of Galveston is generally conceded to be one of the most delightful places to visit during this time of the year, and our efforts to present the subject while doubtless interesting, are far from adequate. We regret that space will not permit the reproduction on a larger scale of the many lovely views sent us for that purpose by the committee in charge, and our consolation lies in the fact the occasion and the opportunity really need but little advertising.

A careful study of the several announcements, particularly those pertaining to railroad rates, hotels and hotel rates, and the scientific work, will fully repay those who expect to attend the session. Experienced travelers will not need to be urged to make their hotel reservations in advance; and others should be wise enough to follow the example of those who have learned from experience. There are hotel accommodations in Galveston for 1,800 guests; but some accommodations are more choice than others. In this connection, it will be noted that the Tremont Hotel has been selected as hotel headquarters, and in the spacious lobby of this noted hostelry will be found the Registration Office, Information Bureau and the Scientific and Commercial Exhibits. The meeting places are in the hotel and its immediate neighborhood. The entertainment features are largely scheduled for the Hotel Galvez, on the beach.

SCIENTIFIC SECTIONS.

A close study of the scientific section programs is earnestly advised. It will be observed that there are three sections in session on the afternoon of the first day, namely, Ophthalmology, Otology, Rhinology and Laryngology; Medicine and Diseases of Children, and Pathology. There are four hours for these sessions, and eleven, eleven and nine papers, respectively, will be read. On Wednesday, the sections on Ophthalmology, Otology, Rhinology and Laryngology, and Medicine and Diseases of Children, will be continued until four o'clock in the afternoon, when they will adjourn to meet with the general session of all scientific sections. At the same time, the Section on State Medicine and Public Hygiene will begin and finish its program, and the Section on Gynecology and Obstetrics will hold forth from 2 to 4 p. m. During the general meeting and joint session of all scientific sections, the committees on the Study of Cancer, Pellagra, Venereal Diseases and Cottonseed Meal, and the Committee on Scientific Work, will make

their several reports. Only two hours time is allowed for these reports, and there will be no discussions. On Thursday, the Section on Gynecology and Obstetrics will continue its work, adjourning at 5 p. m., and the Section on Surgery will begin and close its program, consuming all of the available time on this day. The Section on Life Insurance and the State Association of County Secretaries, will begin their respective sessions in the morning and finish their work at leisure.

AN INNOVATION.

Just here it will be noted that a distinct innovation has been made, upon the suggestion of the President and with the concurrence of the Committee on Scientific Work. The general meeting for the introduction of new officers on the afternoon of the last day, has been moved from the usual 2 o'clock hour to 5 o'clock. The advantage of this arrangement will be readily seen, and thoroughly appreciated by those contributors whose fortune it is to read their papers in the afternoon of the last day of the session. Sections scheduled to cover this last period of time will doubtless have an opportunity this year for the first time, of completing their respective programs. It has almost invariably been the case that the general meeting for this purpose has been slow to gather, and has nearly always prolonged much beyond the scheduled hour of adjournment. This encroachment, together with the time necessarily consumed in disorganizing the one meeting, and reorganizing the others in the same and different halls, very materially shortens the allotted time of the sections. After this, the confusion of leave taking and the universal disposition to be done with whatever one is doing, makes the last day of the session the one to be avoided by section officers and their contributors. It is hoped by the new arrangement to obviate much of this disorder, and perhaps it will eventually turn out that the last day will prove as intersting and entertaining as the first or the second.

ROTATION OF SECTIONS.

As usual, the sections have been rotated in their place on the program, to the extent that circumstances would permit. Unfortunately for some of the seetions, by resolution of the House of Delegates the Sections on Medicine and Surgery may not hold forth at the same time, which rule has neeessitated the crowding of 48 papers into 17 hours. Were it so that the final session of one of these sections could be held during the time of the opening session of the other, the time necessary for the proper reading and discussion of these papers could easily be allowed, and without influencing the time of the other section. In dealing with this situation, the President and the Committee on Scientific Work discussed with some earnestness the advisability of either abrogating this rule or limiting the number of papers to be presented by each section. The scientific program this year contains 145 papers, as against 130 for last year. Notwithstanding this fact, with the exception of one or two sections, the time is really less crowded than before. It will be noted that the time of the General Session and joint meeting of all Scientific Sections has been confined to two hours as against four last year. A close study of the plat published with the program, will reveal the fact that the section meeting places are very conveniently located, all but two of them being either in the Tremont Hotel or the City Hall. These two will hold their meetings in the Y. M. C. A. Building, not more than two blocks away from either of these places.

PUBLIC HEALTH MEETING.

Particular attention is called to the big public health meeting to be held in the City Hall Auditorium Monday night preceding the opening of the regular session. While this meeting is intended primarily for the people of Galveston and surrounding territory, the speakers and the subjects they will discuss will appeal strongly to the medical profession. As many as ean possibly do so, are urged to so arrange their time as to be present on this occasion. It will be noted that all of the general meetings, including the opening session and the memorial exercises, will be held in the big auditorium of the new City Hall.

MEMORIAL EXERCISES.

The Memorial Exercises will be held as usual on the evening of the first day. The exercises will consist exclusively of music and oratory, and every effort has been made to provide a wholesome, appropriate hour for the purpose in hand. A list of our deceased members will

be read and subsequently published. It is essential that this list be as nearly correct as possible, and the State Secretary is desirous of securing additional data of this character to that heretofore published in the JOURNAL.

THE SOCIAL EVENTS.

The social events scheduled for the occasion are most attractive, and are certainly more elaborate than the committee promised the President would be the case. The visiting ladies will be entertained so profusely that many of the entertainments will conflict, necessitating a choice between them. The President-Elect will be honored with a luncheon on Wednesday, which is an innovation. The President will be honored in the evening, as usual, with a reception and buffet luncheon. Automobile rides and the like will be distributed throughout the time of the session. However, the distinctive feature of the occasion, so far as entertainment is concerned, will be the boat ride on the Bay tendered visiting members and their ladies by Messrs. Suderman and Dolson, which will take place immediately upon adjournment of the General Session, Wednesday afternoon.

Various alumni associations, fraternities and reunions, will gather at their respective meeting places, for food, fun and frolic, immediately following the adjourning of the memorial exercises.

SCIENTIFIC AND COMMERCIAL EXHIBITS.

The spacious lobby of the Tremont Hotel, coupled with numerous large adjoining sample rooms, will offer splendid facilities for both the scientific and commercial exhibits. Quite a number of our old friends will be on hand with new and renewed offerings, and there will be those whom we have not heretofore met. No proprietary medicines will be exhibited that have not been approved by the Council on Pharmacy and Chemistry of the American Medical Association, and no commodity of any character that is not suitable for inclusion in the advertising pages of the JOURNAL. This means that a high ethical standard has been established, with which all exhibitors must comply. Occasionally objectionable commodities are exhibited, inadvertently or intentionally, and members are requested to report anything of the sort to the Chairman of the Exhibit Committee, Dr. Heard, who will be found at the Bureau of Information. The Scientific Exhibits will be carefully arranged, and every assurance is at hand that an interesting collection will be secured. Dr. McNeil, chairman of the committee, announces that he will have in constant attendance on these exhibits a sufficient number of demonstrators to meet the requirements of those who care to examine them. These exhibits will probably be arranged in one of the large sample rooms just off the lobby, where the noise and confusion will not interfere with their study.

INVITED GUESTS.

Our list of invited guests includes many distinguished members of the profession. They are those whom we delight to honor, and it is needless for us to urge that they be made to feel thoroughly at home. They come to us at no little sacrifice of time and money, and the honor we seek to extend them is returned to us manifold in the favor of their coming. The list follows:

Dr. L. P. H. Bahrenberg, U. S. P. H. S., Galveston; Dr. E. A. Robin, New Orleans; Dr. J. L. Scales, Shreveport; Dr. F. G. Gengenbach, Denver; Dr. Clifford C. Grulee, Chicago; Dr. C. C. Pierce, U. S. P. H. S., El Paso; Dr. Geo. D. Fairbanks, U. S. P. H. S., Brownsville; Dr. P. W. Covington, International Health Commission, Austin; Dr. R. L. Wilson, U. S. P. H. S., Galveston; Drs. C. Jeff Miller and S. M. D. Clark, New Orleans; Dr. Donald C. Balfour, Rochester, Minn.; Dr. W. D. Phillips, Fraternal Delegate, Louisiana State Medical Association, New Orleans; Dr. J. M. T. Finney, Baltimore; Dr. Robert T. Morris, New York City; Dr. R. N. Looney, State Health Officer, Prescott, Arizona; Dr. W. R. Sweeney, U. S. P. H. S., Galveston; Dr. H. W. Lubben, Fraternal Delegate, Texas State Dental Association, Galveston.

Dr. Carlos Husk of the United States Public Health Service, was on the program for a paper on *Typhus Fever,* by special invitation, but his untimely and regrettable death has denied us the honor and privilege of entertaining him on this occasion. Other guests have been invited who are not yet able to say whether they can be with us, and still others have been unable to attend the session because of conflicting engagements. Fraternal delegates from surrounding State Associations have been appointed, and doubtless some of them will attend, who have not formally notified us of their intention.

THE PROGRAM IS FIXED.

According to the by-laws, there can be no alteration in the program as printed in the

April JOURNAL, except for the correction of errors. Therefore, members can figure in advance on the disposition of their valuable time. We count this feature of our work distinctive and important. It should be appreciated.

We will appreciate advice as to any errors, typographical or otherwise, in time to make the corrections before the reprints are made—about April 25.

THE FARE.

The fare is the usual one and one-third. Members should make inquiry of their ticket agents early, as these tickets are sold on special orders, which may not have been received by the local agent.

It will be particularly noted that the limit on the tickets for this occasion has been advanced to June 1st, of which fact many will doubtless take advantage in prolonging their stay into a very decent little vacation period.

The Tarrant County Medical Society has arranged with the Santa Fe Railroad for a special train out of Fort Worth on the night of May 8th, arriving in Galveston more than an hour earlier than the regular schedule, and in advance of other through trains. This is an advantage readily recognized by those who make it a practice to arrive at the place of meeting on the opening day. It is a matter of some considerable satisfaction to be able to get registered and properly located before the opening session, which usually begins at 10:30 a. m. Those who are interested in this movement should by all means secure Pullman accommodations in advance, either by applying to a Santa Fe agent, or by letter to the City Passenger and Ticket Agent at Fort Worth. This train will care for all passengers arriving in Fort Worth on the evening train.

SCHOOL FOR HEALTH OFFICERS.

The Medical Department of the University of Texas will hold its second annual school for health officers in Galveston, beginning May 12th, and extending through May 26th. This school will be under the direction of Dr. B. L. Arms, Professor of Preventive Medicine, who will have for his assistants physicians skilled in all of the technical and practical sides of the subject. As planned at the present time, the mornings will be free, that those who desire to do so may attend the various clinics, visit the wards of John Sealy Hospital, or take special laboratory work, for which privileges arrangements should be made through the Dean. The subjects to be discussed during the afternoon sessions are varied and entertaining, a program of which may be had upon application to Professor Arms at Galveston. Every phase of the health officer's work will be considered, including vital statistics, quarantine, supervision of school children, school hygiene, defective vision in school children, oral hygiene, public health laboratories, epidemics, preventive inoculations, serum and vaccine therapy, human carriers of diseases, insect carriers of disease, milk, water supply, disposal of waste, etc., etc.

For this occasion the railroads have granted an extension of the tickets sold for the annual session of the State Medical Association, with a final limit of June 1st. Probably no more attractive combination of pleasure and profit could be devised. We are not informed as to the success of the school last year, which was held at Austin, under the auspices of the Texas State Board of Health, but the program was equally as interesting as that planned for this year. As we understand it, no fee is charged for this work, except, possibly, special laboratory or clinical courses under special instructors.

This is "University Extension" work, and it is worthy of the highest commendation. Many institutions are giving a special degree in public health, and practically all of them have arranged to give special courses in this important branch. Of course, all physicians should know the fundamental principles involved in public health work, and generally they do, but there are many sides to every specialty in medicine, particularly that of preventive medicine, which really embraces the major portion of the field of medicine. The efficiency of the United States Public Health Service demonstrates beyond argument the advantage of placing our public health work in the hands of those who make it a special study. It is entirely proper and right that the University of Texas, in co-operation with the State Board of Health, lead in this movement. It would not be improper for the other medical colleges of the State, likewise in conjunction with the State Board of Health, to supplement

the effort. Indeed, among the chief values of medieal teaching institutions, is the effect they may have on the medical profession and the public within their peculiar zone of influence. Well devised courses of lectures, demonstrations and the like, might easily be arranged for in various centers, for both the profession and the laity. Probably this is already being done by the State University, to a certain extent. This would be a good field for the State Medical Association to enter. The Ohio State Medical Association has undertaken such a project, the first effort being a series of lectures on fractures and dislocations in a populous center, and intended for a specified number of surrounding counties. The development of this idea may easily be anticipated and its possibilities for good are great.

JOHN SEALY HOSPITAL.

On another page will be found the pieture of one of the notable institutions of the State. The munificence of its founder, whose name it bears, and of his son and daughter, is worthy of emulation. So much money is wasted in the form of bequests, that the subject becomes one of importance to the whole people. We call attention to this magnificent institution—magnificent not in size and beauty of construction, perhaps, but rather as a concrete evidence of intelligent application of money to a great humanitarian purpose, that our members who may happen to visit Galveston during the forthcoming annual session of the State Medical Association, may observe, and observing return to their homes inspired to advise others to a like intelligent application of surplus funds.

The John Sealy Hospital is the property of the State, and is leased to the city of Galveston. Aside from its purpose as a municipal hospital, its principal other purpose is to supply clinical teaching for the medical department of the University of Texas. Mr. Sealy died in 1884, leaving $25,000 for the establishment of this institution, which sum was immediately after his death raised to $75,000 by his widow, Mrs. Rebecca Sealy. The main hospital building was completed in 1890, since which time the following additions have been made: A separate building for colored patients, built in 1901, at a cost of $18,500, donated by the New York Chamber of Commerce, and supplemented with funds from the General Relief Committee, following the great storm of 1900; Isolation Pavilion for contagious diseases, built by the Regents at a cost of $17,500, which ineluded $13,000 profit from the Galveston State Quarantine Station; Children's Hospital, built in 1912, by the Texas Anti-Tuberculosis Society, at a eost of $13,000, raised by the sale of Red Cross stamps and furnished by the Young Ladies' Hospital Aid Society of Galveston; the Rebecea Sealy Home for Nurses, built by the State last year, at a cost of $90,000, and furnished by the city of Galveston, at a cost of $4,000; The Woman's Hospital, erected and furnished last year by Mrs. R. Waverly Smith and Mr. John Sealy, daughter and son, respectively, of the founder, at a cost of $135,000. Mrs. Smith and Mr. Sealy, in addition to this splendid gift, have at different times during the several years of the existence of the institution, remodeled, repaired, renovated and refurnished it at a total cost of $240,000.

These sums are not at all stupendous, but it is doubtful whether any money has ever been more unselfishly given, and more intelligently applied, and it is to be regretted that there are not more John Sealys scattered throughout the State.

THE ARKANSAS MEDICAL SOCIETY TO MEET IN TEXARKANA.

The Arkansas Medical Society will practically meet in the State of Texas this year, at Texarkana, May 2nd, 3rd and 4th, and a cordial invitation has been extended to the profession of Texas to attend. This invitation is official, and comes from the Secretary, Dr. C. P. Meriwether of Little Rock. Texarkana is easily accessible from a large portion of this State, and the opportunity to observe the working of another State organization than our own, aside from the assurance of a warm welcome and a splendidly devised scientific program, is worth taking advantage of.

DEATH OF DR. RODMAN.

Dr. W. L. Rodman, President of the American Medical Association, a surgeon of great reputation, and well known to many of the profession in Texas, is dead. He was sick but a few hours, and his death came as a shock to his many friends, who were proud of his achieve-

ments in scientific medicine and in the great organization to the head of which he had only recently been called. His obituary will be found in a recent number of *The Journal of the American Medical Association,* to which we refer our readers.

Dr. Rodman always claimed to be a Texan, by virtue of several years practice in this State, and because of the fact that his son was born here. Many of us will remember his visit to the Southern Medical Association at Dallas last fall. His particular ambition as President of the American Medical Association, seemed to be to place on a firm foundation the project he had for so long advocated, the National Board of Medical Examiners, and while he lived to see his ambition partly realized, the doubtless early and complete consummation of the plan can but serve as a monument to him. Formerly a medical officer in the United States Army, Dr. Rodman's interest had also turned to the general project of increasing the medical services of the United States Army and Navy, in proportion to the contemplated increases in these two fighting forces as a whole, and his recent plea that our members appeal to their Congressmen to insist on this point, has borne fruit in this State, at least.

This is the first time, so far as we know, that a President of the American Medical Association has died during his term of office. Dr. Albert Vander Veer of Albany, N. Y., will fill the unexpired term.

DELINQUENTS.

There are nearly 1,500 delinquent members of the State Medical Association of Texas. None of these members are entitled to medical defense from January 1st to the actual date of receipt of their dues in the office of the State secretary. This may be a serious matter at any time, with any member, as malpractice suits are no respectors of persons, and they usually fall where least expected. We speak advisedly on this point, as we have witnessed the lightning strike in unexpected places several times during the last few weeks. It is not only that individual members are delinquent, but whole societies, as for that. In fact, some of the larger societies in the State failed to make their annual reports, or to pay for more than a very few of their members, before the expiration of the constitutional limit, March 31st. It makes no difference when the member paid the county secretary, he is suspended unless his dues are received in the office of the State secretary before the expiration of the time allowed by the By-laws. That is why we have so repeatedly urged that members make inquiries in regard to their membership cards, in order to be sure that they are protected, particularly in the matter of medical defense. Until the last two years, it has made not a great deal of difference whether members paid their dues even up to the time of the annual session, but it is different now, and very different. Any delinquent member can reinstate himself immediately upon payment of his dues, but reinstatement does not extend, so far as medical defense is concerned, back to January first, and any incident for which suit is subsequently filed, that occurred during this interval, is without the protection of the State Association. The Council on Medical Defense is exceedingly anxious to care for every single malpractice suit filed in this State, in order that a speedy termination to that specie of blackmail may be brought about; but it must be remembered that the funds in its hands are trust funds, and may not be expended except in accordance with the terms under which it has been assembled and placed in trust. We feel that we cannot be too persistent in this reiteration. Delinquent members should pay their dues *now,* and it should at least be remembered that the State secretary cannot accept dues from an individual member, either in his office or during the annual session, except a written order from the county society secretary accompanies the payment, authorizing its acceptance in this manner.

VOLUME XI.

With this number we close the largest volume ever issued. During the year we have printed 686 pages of reading matter, as against 551 in the previous volume, and there have been 420 pages of ads as against 350 before. This makes a grand total of 1,106 pages for Volume XI, and 901 pages for Volume X. It will be noted that there is a net gain of 135 pages of reading matter and 70 pages advertising. We have always promised two pages of additional reading matter for every page of advertising, and

during the preceding year we have actually given three for one. It remains to be seen whether our readers appreciate this increase in the face of a daily increased cost of production. It is a positive fact, and we have this from the Publication Committee of the Board of Trustees, that there can be no further increase in size except there is a material increase in the advertising business. Whether the material added has been of value is a matter of taste, of course. The greatest gain has been in original articles, of which there have been 51 more pages in this than in the previous volume. There have been, however, 42 pages more of miscellaneous matter, which includes the Department of Extension and also the Transactions, which were rather heavy last year because of the presence there of the new Constitution and By-laws. There have been 25 pages more of editorials than before, which perhaps might have been dispensed with. Still, it is thought that these comments, while far from either highly scientific or particularly elucidative, serve to arouse thought, and are for that reason worthy of the space they occupy.

Those who have preserved their JOURNALS will find it quite interesting to turn back and make a critical comparison of the contents. It will be observed that each number is divided into several distinctive departments, and the endeavor has been to keep these departments fairly well balanced. Naturally, this could not always be done, because the subjects covered by the original articles group themselves so that in some journals a greater number of pages must be devoted to this department, and consequently some other department has to be curtailed. The cut has been made where it would seem most advisable, several factors entering into the consideration. For instance, it will be noted that the editorial department ranges from 6 to 10 pages; the original articles from 21 to 54, with the exception of the June number, which has only 9 pages of this class of matter; the miscellaneous pages from 2 to 41, the latter including the annual transactions; the news, including society news, society administration and deaths, from 6 to 16, and the book notes running from 1 to 3 pages. The index and list of members cover together, 38 pages. The advertising section has averaged during the year from 34 to 38 pages.

The following comparative table may be of interest, and is submitted for what it is worth:

	VOL. X. Pages	VOL. XI. Pages	GAIN Pages	LOSS Pages
Editorial	72	97	25	
Original Articles	239	290	51	
Miscellaneous	85	127	42	
News, etc.	103	114	11	
Book Notes	22	20	....	2
Index, List of Members	30	38	8	
Total Reading	551	686	137	2
		Net Gain,	135	
Ad Pages	350	420	70	
Grand Total	901	1106	205	

THE INDEX.

It will be noted that the index published in this number takes quite a good deal of space. It can be readily understood, also, that the compilation of such an index has consumed a good deal of valuable time. Compiling an efficient index is expert work. We trust this money, time and labor, has not been wasted. If we were convinced that at least one member in each county society would preserve his JOURNALS and utilize the index for reference, as occasion might require, we would feel amply repaid for the endeavor. Where one reader will do this, eventually another will, and so the custom will spread and eventually prevail. It is our desire that the custom shall become universal, hence our devious endeavors and much persuasion.

The plan followed in the index is partly that of other publications, and partly of our own devising. A brief description precedes the index, a careful reading of which will facilitate its use. It will be noted that every item in the volume is cross indexed; that is, the several aspects of the subjects are listed under the headings one would most likely look for them. While our cross indexing is not as complete as it might be, we have gone much further than the average publication of the size and scope of the JOURNAL. If any reader fails to find properly listed any particular item in this volume, we will appreciate the favor very much if the matter is called to our attention. It is our earnest endeavor to make this index complete, and make it meet the requirements of those who care enough for the JOURNAL and for the history of the Association to preserve the volume. The number who preserve the JOURNALS and bind them, more or less securely, each year, is increasing, and we hope it will

continue to do so. Any assistance we can render in filling in vacant files will be gladly extended. As usual, we will have a number of volumes bound, in the usual, uniform style, and they will be disposed of to our members at or below cost. We are not able to say at this writing just what that will be. Cost heretofore has been somewhat in excess of $1.50, at which price we have exchanged the bound for the unbound volume. We will endeavor to do as well this year, but cannot promise. We have a few bound volumes of preceding years, for those who would like a complete file. Any information concerning this matter will be gladly furnished upon application to the editor.

CORRECTIONS FOR THE MARCH NUMBER OF THE JOURNAL.

Dr. Sexton calls our attention to a typographical error in the last paragraph of his article, "The Nephritis Problem in Medicine and Life Insurance," page 584 of the March JOURNAL, wherein he is made to say "Removal of the kidney function" instead of "Renewal of the kidney function," which his manuscript shows. While it is quite clear to the observant reader what the author meant to say, such occurrences are extremely aggravating, perhaps more so to the editor than to the author.

Through an unfortunate oversight, the advertisement of Sharp & Dohme was omitted from the March number. In view of the high ethical standard adopted by the JOURNAL for its advertising pages, and the fact that heretofore advertising space has had to be denied manufacturers who persisted in submitting copy that would not stand the test, we feel it incumbent upon us to explain that no such reasons caused the omission of the advertisement in question. This firm has been a consistent patron of the JOURNAL from the beginning, and it is but due them to say that so far as we now recall, they have never submitted copy for their space that has been in the least questionable. This notice has not been requested by Sharp & Dohme, although they have made inquiry as to why their contract was vacated for the time, and its appearance will be an entire surprise to them. We make the explanation because it is due them, and because we are proud of the fact that the high ethical standard adopted for our advertising pages makes it necessary to do so.

ORIGINAL ARTICLES

RESPIRATORY SYMPTOMS IN HEART DISEASE.*

BY

J. S. LANKFORD, M. D.,

SAN ANTONIO, TEXAS.

It would not be proper for me to occupy this chair without paying some tribute to the memory of the lamented McCutchan,** who would have served you better. As a man, he was straight and true; a friend who would defend his friends in the face of an enemy. As a physician, his head was clear, his heart was honest, his work was good and he was ever ready to keep march with the progress of Medical Science, and he was always present to enter ably into the discussions of medical topics at our Association meetings. His genial presence was inspiring and we shall miss his clear eye and his ready tongue, as we listen in vain for the voice that is silent forever.

The urgent demand of our patients for relief from the respiratory embarrassments of heart disease makes it well for us to discuss our knowledge of the essential points in the diagnosis and treatment of these conditions. This is especially true for the reason that the treatment varies greatly according to the cause. Anything that will throw light on an insurance examination is to our advantage; hence, a study of this subject is alike important to the physician and the examiner.

Physiologists have proven that the respiratory center in the medulla acts automatically, sending out impulses to breathe, something like the sino-auricular node starts each normal heart beat. It matters little, clinically, whether the stimulus of normal action is due to deficient oxygen or excess in carbon dioxide, or to both. We know that the breathing center is in close touch with the skin and with every organ of the body, by nerve reflexes; that it may be affected by emotion, excitement, extreme anger, passion and other mental states, and that it is directly influenced by the quality of the blood in health and disease. The communication between this center and the lungs, through the nerves, is intimate and powerful, and it is equally so with the heart as is shown by the various respiratory symptoms that occur in cardiac disease.

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*Chairman's Address, Section on Life Insurance, State Medical Association of Texas, Fort Worth, May 5, 1915.

**EDITOR'S NOTE.—Dr. J. M. McCutchan of Waco, died shortly after receiving the appointment as Chairman of the Section on Life Insurance. Dr. Lankford, to whom is largely due the establishment of the Section, was prevailed upon to assume the duties of the office thus made vacant.

One of the earliest symptoms of important disease of the heart is undue shortness of breath on exertion. It may be the sole symptom causing the patient to seek attention and the question must be determined whether it is simple or serious, for it may be the beginning of the gravest myocardial or other cardiac disease, or may be due to less important conditions. It occurs in unimportant vagus disturbances, such as sinus arrhythmia, transient indigestion, and various irritable conditions of the nervous system. It may occur in a sound heart which is out of proportion to the body in size. We occasionally find a man normal in all respects except that the heart is too small. If a man is perfectly free from all indication of disease but is inclined to shortness of breath on exertion, his heart is probably too small for the body. This condition is especially likely to result from that form of infection in children which is generally characterized, "growing pains." It occurs, also, in repeated infections of other kinds, especially in the throat. The heart may not have been inflamed, but has been sufficiently embarrassed in nourishing itself to prevent the proper growth. A like limitation of growth occurs in the young, inveterate cigarette smoker.

A similar condition exists where a man weighs 130 pounds at 25 years of age and 230 at the age of 40. His heart has attained the growth necessary for a small body and is always tired from carrying such a heavy burden, and yet it may be a sound heart. There is grave danger of high blood pressure and a breakdown in the heart or kidneys, in this kind of a case, after the age of 45, because the heart cannot nourish itself properly and do the work of such a heavy body. These patients should be cautioned to live rigidly within the reserve power of the heart, to avoid stimulants, to drink water sparingly, and especially should they be directed to steer clear of excess in starches and sugars, the fat producers. It is better for them to take the chances of an albuminous diet than to put on more flesh. There is here some disturbance of the internal secretions not yet fully understood, but it is probable that the thyroid and other duetless glands are involved in this accummulation of flesh. No insurance applicant requires a more thorough examination than the heavyweight.

Fortunately, we now have a means of determining whether these hearts are diseased, or suffering from embarrassed breathing on account of disproportion in size or from carrying too much weight. My experience now extends over four years time and hundreds of cases, in testing out the efficiency of the myocardium by blood pressure and exercise combined, and it has impressed me profoundly as being not only accurate but almost infallible. Apply the instrument, take the pressure, let the patient carry the bulb and manometer in his hand and walk up two flights of stairs or go through other exercise to a similar degree, and make the test again within *thirty seconds;* if the heart is free from disease and of normal power, the systolic pressure will jump 25 to 50 millimeters and will drop back to the starting place in two or three minutes, sometimes one minute. The diastolic will usually remain stationary, but may fall or rise in a very limited way. If the systolic pressure comes back very slowly, occupying many minutes, it is suggestive. If it actually falls instead of rising, the myocardium is in a bad state. It is especially bad if the systolic falls and the diastolic rises, narrowing the pulse pressure, for the heart has no reserve power. It should be remembered that the strong heart of the athelete or any powerful man, will require more exercise to produce the same result.

Serious organic disease may be confused in this test with a poisoned heart, but the absence of the usual signs, and the collateral symptoms of poisoned heart, as auto-intoxication, marked indicanuria, albuminuria, or some infectious condition, especially from the teeth, will point the way to the truth—the blood pressure is low and the pulse pressure very limited. This condition may be relieved by treatment and the heart saved from organic disease. If the patient is put on a rigid diet, elimination given close attention and all nerve strain removed, it is surprising how quickly the heart will improve and respond properly to this combined test.

There is a substandard heart that causes embarrassed breathing. It is characterized by more or less general weakness and nervousness, with poor digestion and indefinite pains in the region of the apex. Evidences or organic disease are absent but the polygraph shows irregularity of the pulse in time and volume. These cases will generally yield to strong supportive treatment and proper elimination. Everything possible should be done to build up the nervous system.

In very grave heart disease of any kind, there is always shortness of breath on exercise and sometimes air hunger on exertion. In nearly all cases there is inability to stop breathing, a very significant symptom. Continuous labored breathing is also characteristic of serious heart disease, indicating an exhausted myocardium. Unconscious, rapid breathing is a symptom that is often overlooked both in chronic heart disease and in heart complication in infectious diseases of various kinds, especially typhoid fever and tuberculosis.

Cardiac asthma attends many cases of organic heart disease. The patient will be awakened at night with great distress in breathing, and after intense suffering for minutes or hours, will suddenly find relief. Sudden spells of suffocation during the sleeping hours is another

symptom that is often found and is very distressing.

Aortic insufficiency is always attended by embarrassed breathing in some form. This condition is easily diagnosed by the bloodless surface, the very wide pulse pressure and the diastolic murmur. These cases are nearly all syphilitic and when taken early are greatly benefited by mercury and iodide, along with salvarsan. My experience has been that in the early stage, digitalis is detrimental. Later in the disease, where the heart has become greatly enlarged and dilatation is marked, digitalis is invaluable.

Mitral insufficiency is accompanied by short breathing on exercise, or it may be continuous if the myocardium has become involved, dilatation taken place or dropsy occurred, and especially if there is much cyanosis. The persistent but intermittent use of infusion of digitalis, made from the standardized English leaves, along with moderate doses of strychnine will work wonders in these cases, especially when attention is given to secretion and excretion.

Mitral stenosis is usually accompanied by shortness of breath on exercise, which may become a dominant characteristic late in the disease when the myocardium is in serious trouble. Digitalis is of great service in this disease, when it reaches the stage of failing heart. Strophanthus seems to serve better in some cases, but the reason for it is uncertain.

Angina pectoris leads to great embarrassment of breathing on account of pain in the intercostal muscles and the nerves of the skin over the region of the heart, on the inside of the left arm and sometimes the right, and down, back of the left ear. The muscles in these regions will be found tense, and tender on pinching. Almost any form of grave heart trouble may be attended by this unfortunate condition, and of course, the treatment will depend upon the cause. For immediate relief there is nothing equals the nitrites, especially the nitrate of amyl. Bromides are useful and morphine may be necessary.

Suffocative oedema of the lungs with great dyspnea, may occur in the terminal stage of any serious heart disease; but this is rarely amenable to treatment, and is mentioned merely as a matter of diagnosis and prognosis.

Of all the distressing conditions that fall to the lot of the physician to handle, there is none, it seems to me, that equals that condition of advanced cardio-renal disease, with high blood pressure, auricular fibrillation and heart block, where the Cheyne-Stokes respiration has appeared and is persistent. Lewis has recently written an able article on this subject, and attributes the symptoms to diminished alkilinity of the blood—acidosis, from non-volatile acid. This is partly true and it is astonishing how quickly relief may be had when the patient's blood is rapidly filled with bicarbonate of sodium or potassium, or some form of lime. The fact that lime sometimes gives the best relief would seem to indicate calcium deficiency in some cases. It has been my experience, however, that alkalinization does not always bring relief. Digitalis may be pushed to the production of heart block and still the patient suffers in great desperation. Small doses of morphine here are indispensable. It has occurred to me that these extreme cases that are not relieved by the alkaline treatment, suitable diet, or by digitalis, are due to a completely disorganized condition of the nerve structure of the heart from gummata, chronic inflammation, fibrosis or calcification. The breathing center is easily impressed by nerve reflex and it is reasonable to suppose in these cases of advanced degenerative change, that the sino-auricular node and its line of transmission is practically destroyed and the whole mechanism of the heart completely upset in function, keeping up continual overstimulation of the center, just as irritation in the ear may cause a cough through pneumogastric reflex; or as nasal disease in a similar manner may cause bronchial spasm. Certain it is, that the condition is not due to a lack of aeration of the blood. The kidney complication in these cases is a matter of great importance, and it is even possible that there are matters retained in the blood that we know not of, originating from the kidney deficiency causing the condition. A significant fact is that in many of the cases where indican has been a very important factor for many months, the indican suddenly disappears about the time of the onset of the Cheyne-Stokes respiration. Is it not likely that we have retained indican in the blood, with all of its mischievous allies, just as we have urea and chlorides, causing what we might call indicanemia, a condition closely simulating the retention of urea? Digitalis is much more effective in these cases if preceded by good doses of diuretin, for a few days, and this fact is suggestive that the kidneys are involved in some way.

The blood pressure is low or high in serious heart disease, in proportion to myocardial change or kidney complication. In rapid degeneration of the cardiac muscle the systolic pressure may drop a hundred millimeters in a few months. It is a grave mistake to reduce the systolic with nitrites or other depressants; for the diastolic pressure tension is not correspondingly reduced and the heart is depressed. Some cases attended by high blood pressure are greatly relieved by free cartharsis with salts. A full dose of cream of tartar at bed time is useful, and some are greatly benefited by a nightly blue mass pill for a long period. As a

general treatment for serious heart disease, where respiratory difficulties occur, rest in bed is important but in some cases, where cyanosis is absent, the patients do better with a little exercise gradually increased.

Respiratory symptoms in heart disease demand our instant and best attention, and it is comforting to know that we have so satisfactory a test in diagnosis, prognosis and treatment, as is found in blood pressure and exercise combined. Improvement or a return to the normal can, by this method, be readily noted in the progress of treatment; or, on the other hand, a certain prognosis given. Of course, it should be remembered that there are some cases where the myocardium is too weak to stand this test and the patient should be put through a limited exercise, if any.

It will be very interesting to watch the further investigation of the chemistry of dyspnea and learn how much of the difficulty of respiration in the various forms of heart disease is due to mechanical defects and how much to relative acidity of the blood.

THE OBLIGATION OF THE MEDICAL EXAMINER.*

BY

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From the point of view of education, intellect, social standing and service to humanity, no field of human activity holds a higher standing than the profession of medicine. The work calls for selfdenial, patience, courage and great ability, and the medical men and women of America respond nobly to the demands. This is strikingly attested by the loyalty and affection of a physician's patients. There is probably no stronger tie outside of blood relationship than that between doctor and patient, built as it is upon years of intimate, disinterested and faithful service. A patient cannot adequately repay the obligation to the man who sacrifices his home life, his leisure, his sleep, his recreation, in order to sit by the bedside of a loved one, coaxing back the fading spark of life.

In taking up insurance medicine as a specialty, I do not feel that there is sacrificed any of the finer or more altruistic motives of the profession. However inspiring it may be to win the victory over death, the practitioner's efforts too often are defeated, and he must leave the house when death has called the father, well knowing that the frail mother and the little children are alone and penniless, facing a problem that may be more terrible than death itself. Few physicians are able to supply from their own pockets, no matter how much they might wish to do so, the income necessary to such a family for the bare necessities of life.

Where medicine has been unavailing to effect a cure, and when no other hand is stretched out to help the destitute wife and children, who shall make an unfavorable comparison of the worthiness of an institution which shall replace the income of which death has deprived them? Medical selection is a vital factor in such an institution, and medicine can well be proud of sharing in the conduct and the success of so beneficent a plan. Life insuring deserves the same care, the same interest, and the same ethical administration as is demanded by life and health preserving. They are both in the highest sense broadly humanitarian.

I believe that the failure of physicians to give their best service to insurance companies is due in a large part to their failure to appreciate the obligation of this service. In the case of an individual patient, the immediate responsibility is evident; where this responsibility is administered through a corporation, the obligation is as real, though not so evident. The tearful, anxious mother, or the suffering child, make unquestioned demands upon our utmost efforts. In passing upon an insurance applicant, the picture of the widow and the children dependent upon the success and earnings of the company which holds their property in trust, should equally demand our best service. Carelessness and ignorance in practice bring prompt misery and pain. Carelessness and ignorance in insurance examining are a tax on an institution which has for its prime motive the protection and safeguarding of dependents.

The obligations of the work of life insurance examining might be divided for study under three general heads: (1) Moral obligation; (2) Business obligation; (3) Professional obligation.

1. *The moral obligation* will not need emphasis or elaboration when the examiner has a proper appreciation of the principles of the business. Physicians are prominent in lending their moral and financial support to all institutions of social service and betterment. Their names will be found on the managing boards of hospitals, orphan asylums, almshouses and homes. The prior appeal of life insurance is tersely expressed by the street car advertisement of a Chicago company, which reads: "You don't believe in life insurance? Visit an orphan asylum." Life insurance should command the admiration and support of the medical profession as a whole, by virtue of its

*Read by invitation before the Section on Life Insurance, State Medical Association of Texas, Fort Worth, May 5, 1915.

social service. It should certainly have the earnest co-operation of those physicians who earn a part or all of their income in examination fees.

The confidence implied in an appointment as examiner should not only guarantee the best professional service, but should bring loyalty, interest and co-operation. A true conception of the moral obligation involves the safeguarding of the company's interests wherever they may be jeopardized. Most frequently this will be shown by the reports on applicants, but an examiner can be extremely helpful in reporting irregularities of agents, attempts at fraud by applicants, in giving assistance in locating desirable examiners, etc., etc.

The medical report should be absolutely unbiased by the importunities of the agent, the demands or threats of the applicant, or the appeal of the prospective widow and orphans. This is frequently a severe test, and some physicians in good standing fail to meet it. With an insistent agent on the one hand, an angry applicant on the other, with a dependent wife and children, there would seem to be a temptation to shade the blood pressure enough to bring it below 160 mm. Hg., to question the existence of a faint ring at the point of contact between urine and acid, to listen to the heart or lungs through the clothing, to omit mention of known habits of dissipation—in fact, to favor the agent or the applicant by suppressing information for which the examiner accepts a fee and which can be withheld only by a breach of trust and misrepresentation. Examiners should appreciate that to withhold information material to the risk, is as disastrous and really as dishonest as gross misstatements.

2. *The business obligation.* This is a common source of failure and embarrassment to all professional men, especially doctors. Our business training is meager, and our appreciation of the necessity of systematic business methods is limited.

In insurance underwriting, promptness is a most vital factor. A delay by the examiner of twenty-four hours in completing an examination may cost the agent several hundred dollars, which he has earned by weeks of hard work.

All the ordinary business demands must be observed in insurance work: courtesy, tact, promptness, rapidity and accuracy, are of equal importance to scientific requirements. Extreme care and skill in the examination are wasted if the examiner forgets to mail the application, or if he omits answers which necessitate delay and the applicant refuses the delayed policy. Appointments when made and accepted should be religiously kept. It is not easy for the agent to close an application and arrange for the examination. It is inexcusable in the examiner to be late for the appointment or fail to keep it. He must be accommodating and try to meet the wishes of the applicant and the agent in regard to the place of examination, provided always that it is suitable for a proper examination. He should be willing to encourage a faint-hearted applicant and argue the virtues of life insurance. He should see that every question is answered and that all requirements of the examination are fulfilled. All correspondence from the home office must be given immediate attention.

3. *The scientific obligation.* This is the part of the service that is most clearly recognized and understood, and yet it too is frequently covered in a careless and indifferent manner.

The work of a general practitioner, owing to the insistent demands on his time, is apt to become superficial and hurried. He looks at the tongue of the patient, or feels the pulse, with a very inadequate idea of diagnosis. In practice this dangerous custom can be supplemented in later visits. In insurance work, the one examination is final, and on its representation must be risked a liability for thousands of dollars. Careless methods which may be corrected in practice are disastrous in insurance work. The examination must be approached in an orderly manner, and each detail given systematic attention.

The form and amount of the policy, and the beneficiary, are factors in selection. Where the amount of insurance applied for is greater than the apparent means of the applicant would justify, an attempt at fraud may be suspected. In regard to the form of insurance applied for, experience has shown conclusively that the poor grade of risks are more apt to apply for term and cheap insurance, and, conversely, endowment insurance and other high premium forms give the most favorable mortality experience.

The financial relation of the beneficiary to the applicant is a most important point in the application, and has a very decided bearing upon the grade of risk. This is described by the technical term "insurable interest," of which an examiner should have a reasonable understanding. An insurance policy is designed to re-establish a financial relation interrupted by death. It takes no cognizance of blood relationship. When a relationship which would result in financial loss to the beneficiary does not exist through the death of the insured, there is no proper insurable interest. To take two common examples of insurance proposals in which there is no proper insurable interest: a husband who refuses insurance on his own life, but who desires to insure his wife, or a selfsupporting son who desires insurance on his old mother or father, naming himself as beneficiary. We do not suspect contemplated homicide in these cases, but

we do feel that the son or husband has reason to believe that their investment will prove profitable to them, and experience has shown that their judgment is justified and that such a transaction is unprofitable and improper from the company's point of view.

The age of the applicant should correspond with the apparent age. Premature ageing is one of the surest indications of an impaired longevity.

The personal history is a very important factor. The difference in attitude of a patient and an applicant cannot be too strongly emphasized. The patient is fluent in the description of his symptoms, his indiscretions in habits, his previous illnesses. The admission of such impairments must often be drawn from an unwilling applicant by patient and skillful questioning. This, of course, is particularly true of an impaired applicant who is attempting to obtain standard insurance, and in such a case a correct history is vital. A true history of alcoholic excess or venereal disease is naturally extremely difficult to obtain, as few men hesitate to misstate these answers.

In the physical examination proper, a physician has an opportunity to use to the utmost his skill and knowledge. The applicant will not submit to such an examination as we can give a patient. The work must be done quickly, and a judgment based on a single interview. It is therefore particularly important that the examination should be made systematically, carefully, and thoroughly. There may be no second opportunity to correct mistakes and omissions.

The general appearance of the applicant must be carefully noted. An impaired risk frequently "looks" impaired, without any definite lesion being discoverable. I remember one of my early mistakes which would have been avoided by laying sufficient importance on this point. A young man looked rather sallow and lacking in vigor. A completely negative examination outweighed this appearance in the recommendation, and he died within six months of tuberculosis of the intestines.

General tendencies should be borne in mind: for example, look especially for signs of tuberculosis in young light weights, where there is a history of indigestion, recent change of climate, particularly here in Texas; look for thickened arteries, high blood pressure, casts and albumin in men over 45, in the obese, in high livers, in applicants with short family history and with several cases of apoplexy, heart disease, or Bright's disease in the immediate family.

The examination of the heart and the lungs must be thorough: therefore all clothing should be removed from the chest and careful inspiration, percussion and auscultation performed in order over the back and front. Slight dullness, prolonged expiration, lagging of the apices, a few crackling rales, require careful work in order to detect incipient, localized areas of tuberculosis. Percuss out the area of cardiac dullness and note any enlargement. Careful auscultation at each valvular area should detect any valvular defect—special care to be used in cases with a history of rheumatism, tonsillitis and chorea.

We now expect every cardiovascular examination to be supplemented by a systolic blood pressure reading, or, better still, both systolic and diastolic, so that we may obtain the pulse pressure. The limits of the normal systolic blood pressure are becoming more and more restricted. The general opinion appears to be that a reading above 140 mm. Hg., or below 105 mm. Hg., deserves careful consideration—the higher pressure indicating probable cardiovascular, renal disease, and the lower pressure suggesting a condition of lowered resistance, or possibly a tuberculous infection.

No part of the physical examination furnishes less satisfactory data in proportion to its importance than the urinalysis. The urine furnishes the most sensitive indication of many morbid changes to which we have access in an insurance examination. Most toxaemias and chronic structural changes, if at all severe or advanced, produce enough renal irritation to give a reaction for albumin or sugar, or to produce the excretion of casts. An examiner should, therefore, be sure that his negative report on the urinalysis is correct beyond question. Most companies do not object to paying the five dollar fee demanded by some state medical associations, as here in Texas, provided they receive a thorough, competent examination; but to be frank, the selfcomplacent claims of some societies, upon which they base their demand for a five dollar fee, seem ill-advised when we receive examinations day after day from physicians of good standing who either cannot or will not make a sufficiently delicate urinalysis to detect serious renal changes. Carefully compiled records show that not more than 25 per cent of the average examiners report albumin unless it is present in large quantities. There would seem to be no good excuse for this, as a delicate urinalysis test is purely mechanical and can be taught to any reasonably intelligent clerk in a very short time.

The average physician fails in this work because of the neglect of a few simple requirements. There must be a strong, bright light, a dark background, clean test tubes, properly prepared reagents, and a little care and time. To boil a few centimeters of unfiltered urine at the wash stand near the back of the room, in a soiled tube, and then to add a few drops of acetic acid, and report the specimen negative unless a thick white cloud appears, is so misleading as to be worse than useless.

The destroyed confidence of the home office in the urinalysis of the average physician is leading to the gradual extension of the plan of having the urine forwarded to the home office for competent examination, and unless physicians give insurance companies competent urinalyses, which they certainly have a right to demand, I believe that all urinalyses will ultimately be made at the home offices or by local chemists. As a urinalysis is worth at least two dollars, the ordinary five dollar fee will necessarily be reduced by this amount. The examiner cannot expect to be paid for a grade of service on which the company cannot feel safe in taking final action.

I have recommended very strongly the Ulrich modification of the heat and acid test, because it is simpler and gives a clean-cut, positive reaction if albumin is present, even in small amounts. The method recommended is as follows: Put one pound of C. P. sodium chloride into a quart bottle and fill the bottle with hot water. This stock solution may be replenished as it is used, by the addition of hot water until all the salt has been dissolved. Filter some of this stock solution through cotton into a graduated pint bottle and then add enough strong acetic acid to make a 2 per cent solution. This solution should be crystal clear, and will keep indefinitely. Boil 2 c. c. of the solution in a *clean* test tube, and while it is at boiling heat, overlay it carefully with the filtered urine. If albumin is present, a white ring at the point of contact will be visible in a bright light.

In connection with a review of the obligation of the medical examiner, a word should be said on the obligation of the companies towards the examiner—an obligation which I regret to say is not always rigorously observed.

In return for the kind of service expected, the company must regard its obligation towards the examiner as equally important. His appointment should be assured him throughout the period of good service, absolutely independent of the likes or dislikes or prejudices of the agent. The priority in the use of the chief examiner and the indicated sequence in the use of alternates, must be enforced unless their unavailability is established. All information given by the examiner must be held a strictly confidential and professional communication. He will appreciate letters from the medical director pointing out his omissions and apparent mistakes, or technical points in medical selection which are outside the ordinary medical education. He will also be interested and helped by advice of early death losses on business that he has examined.

A realization by him of interest and effort at co-operation in his work will stimulate a similar attitude on his part. He will particularly appreciate a line of thanks in return for some special or extra effort he has made, or for particular evidence of care and interest. The more personal the relation which the company establishes with its examiners, the better grade of service they will receive. An examiner who feels his future fees may be jeopardized by the reporting of an impairment, is not receiving the consideration which develops the best results.

Whatever individual points in the work of a medical examiner for life insurance seem to require criticism or repeated corrections, the general statement can be made that a far better average is being attained, and that the blanks received at the home office are showing a better grade of scientific work and a more encouraging appreciation of the great obligation which the work entails.

NOTE:—This paper is discussed with the other papers of the symposium, page 643.

LIFE INSURANCE AS A SPECIALTY.*

BY

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EL PASO, TEXAS.

"If a man preach a better sermon, write a better book or make a better mousetrap than his neighbor, though he build his house in the woods, the world will make a beaten path to his door."

That any doctor can make a life insurance examination is evidenced by the fact that it is done by the competent and incompetent alike, every day in city, town, village, hamlet and by the wayside in communities that can not boast even of a hamlet, and such examinations are accepted usually without question, by most life insurance companies. I believe there is room for improvement, however, in this field of endeavor and it is to blaze a trail in this direction that the suggestions contained herein are made.

This work is only in its infancy, but as it grows and develops demand will be made for better trained physicians—experts, to carry it on. An expert in life insurance work should be first of all a person of strength of character and integrity. Technically, he should be specially trained in the art of observation and there should be in his makeup at least a dash of those qualities that go to make up that delightful creation of Dr. Conan Doyle—*Sherlock Holmes*, for there is no gainsaying that life insurance examinations sometimes do involve a certain amount of detective work. Also, a good life insurance examiner should be an expert phys-

*Read before the Section on Life Insurance, State Medical Association of Texas, Fort Worth, May 5, 1915.

ical diagnostician, one not only able to say that there is an adventitious sound here or there about the lungs or murmur over the heart, but able to say further, with conviction and positiveness, that such a finding is or is not of serious import, for, while it is all right to pursue a policy of watchful waiting when there is plenty of time, it works an injustice to applicant, agent and company alike, to induce a rejection when it is not deserved. In order to best bring out points about the applicant that might be of vital importance, it is needful as well that an examiner should be tactful, patient and at times persistent. And it is needless to add that he should be painstaking in regard to details. He should, in fact, as suggested by one of our directors,[1] regard the examination blank as merely a framework upon which to weave the fabric of a complete pen picture of the applicant. He should know why every question is asked and be sufficiently tactful to bring out an entirely free and satisfactory answer without offense to the applicant.

Of course, any one who pretends to make first class insurance examinations should be possessed of the necessary instruments of precision; but even this is a matter that is often neglected and will be neglected until equipment with the proper and necessary apparatus is absolutely demanded by the companies. It is doubtful if the ideal will ever be attained in the selection of examiners until companies maintain a regular inspection, and inspect and examine the examiners.

That there is need for a more careful selection of risks is shown by the mortality statistics; for instance, as Smith[2] has brought out, quoting figures from Dr. W. K. Harrison, 60 per cent of the death from tuberculosis in fraternal insurance companies occur within the first two years after being insured. This certainly is a condition that could be improved by more careful examinations. Again, the statistics of the United States Government show a greater longevity among women than among men, yet the mortality tables of insurance companies show a lesser longevity. Why is this? It is because women applying for insurance, as many do upon a premonition of their being something wrong, as a rule are less carefully examined than are men.

But why, it may be asked, do life insurance companies accept examinations alike from the competent and incompetent, the careful and careless, the painstaking and nonpainstaking examiners? It is because life insurance companies, in spite of the large philanthropic element in their makeup, are after all merely business organizations, like other business organizations and out for the business, and competition is so keen between the rival companies that they are inclined to forget some of the finer points and ideals. Whether in future the philanthropic element will get the better of the purely commercial, remains to be seen, but it is safe to predict that either on account of a lofty idealism or else because it will be found to pay in plain dollars and cents, life insurance companies will become more particular about *who* makes their examinations and *how*, and the physician who is properly equipped and who is willing to give his time and attention to this kind of work, will find himself appreciated. But we have a long way to travel before that happy state of affairs is realized. The first move will have to be made by the companies themselves and should be in the direction of revising and reducing their force of examiners. With half a dozen different examiners in a town, no one gets enough work from any company to make it worth his while to pay much attention to it. But with a closer relationship between the medical director and his examiner, matters can be improved.

In conclusion, the time is scarcely yet ripe for specialism along this line, but it behooves those interested to endeavor to raise the standards as best they can and to promote in every possible way a cordial co-operation between the home office, the agency field force and the medical examiner, for with the general adoption of the plan of periodical examination of policy holders, to keep them well, and the development of the work of that self-supporting philanthropy, the Life Extension Institute, it is believed that the future holds much encouragement for those interested in this very attractive specialty.

NOTE: This paper is discussed with the other papers of the symposium, page 643.

1. Davis, Jno. L.: Monthly Letter to Examiners, No. 11.
2. Smith, M. M.: *Tex. State Jour. of Med.*, December, 1914.

THE RELATION BETWEEN THE LIFE INSURANCE AGENT AND THE LOCAL MEDICAL EXAMINER.*

BY
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It is my firm belief that there is more honesty than crookedness in the world. The time is ripe for all life insurance companies, and their examiners, to know that there are just as many honest, straightforward men among life insurance agents as in any other line of business. The life insurance companies are beginning to learn that good agents are their greatest asset, their mainstay and support.

1. What does an insurance company expect from its examiner?

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The company expects the examiner to give all three, the company, the applicant and the agent, a square deal; to give the company as true a picture of the applicant as is obtainable; to get an accurate family history of the applicant; to go to the necessary trouble of clearing up any obscure causes of death in the applicant's family; to ascertain whether or not there were any communicable or hereditary diseases, and to explain all conditions of illness in the applicant's own experience, for what the applicant may consider insignificant may have a great deal of bearing on the risk.

If the questions, as asked in the application, are ambiguous it is up to the examiner to couch them in simpler language, so they may be more readily understood by the applicant. It is but human that the applicant should prefer to have his weak points discovered rather than to admit them. A great many applicants feel that as long as you are unable to discover some of their hidden troubles, or those of their family, they should not jeopardize their chances of getting insurance by disclosing their secret. In such cases the physician must use his wits in order to get under the applicant's guard and secure the desired information.

Often, an applicant who knows that he is a poor risk, will try to hasten an examination, hoping that in this way his deficiency will be overlooked. I remember well one case in which the applicant claimed to be in a great hurry as he had to catch a train, but explained that he was anxious to secure insurance, as he was not carrying any at the time, and he hoped I would hurry with the examination. My suspicions were immediately aroused, and I was not greatly surprised, after proceeding with the examination, to find evidences of goitre. Another applicant, who posed as a friend, requested that his application would not be turned in, if it should develop that he was not a first-class risk. This man showed a urine that was loaded with albumen—of course, his application was immediately turned in to the company.

2. What does the applicant expect from the examiner? Allow me to digress a little by answering this question in an indirect way. Place yourself in the applicant's position. Ordinarily, the layman thinks of a physician, and of a physicial examination, as a severe ordeal, a something mysterious and to be dreaded; consequently, he is more or less excited and nervous. It is for the tactful physician to allay his fears, and place him at his ease; and in a skillful and adroit way draw out his family history, and all other necessary information. Sometimes the applicant will make a "mountain of a mole-hill," and vice versa. Occasionally, it is well for the examiner to take the applicant's pulse at the end of an examination rather than at the beginning—after it has had an opportunity to become normal, following the excitement of the examination.

The specific gravity of the applicant's urine may be off a little, one way or the other. In this case, it is only fair to the applicant to have him return several times, if necessary, so that a fair specimen may be obtained. Again, the applicant may have recently been ill, and his physical condition not up to the standard, in which case the examiner should wait until the applicant has thoroughly recovered before completing the examination.

Occasionally, the applicant does not remember the ages of the different members of his family. I think it is only fair that the examiner should assist him by suggestion, association of facts, or any other possible way, to arrive at the ages, if this information cannot be obtained from some one who knows definitely.

3. What does a good life insurance agent expect from the examiner? That he be courteous to his applicant, prompt in his appointments, and above all, fair. Occasionally, an agent will write an applicant who is not strong for insurance, but who at the same time needs it and does not realize it. He is not thoroughly convinced, and gives the agent merely a lukewarm promise of taking the insurance. He will probably agree to see the examiner and be examined—and immediately proceeds to forget that he ever made such a promise. And here is where the diplomacy of the tactful physician comes into play. He can at once reassure the applicant by showing him the benefits to be derived, not only by himself, but by those dependent on him, from passing successfully a physical examination, and obtaining the protection of a life insurance policy. He can explain to him that the company is not seeking any favors from him, but that the proposition is purely a cold-blooded business one. He may point out to him that a few dollars worth of insurance may save the investments of a lifetime to his loved ones. A simple appeal to the applicant's better nature, a hint concerning those most dependent on him for support, and a reminder that his present excellent health makes no difference to the Grim Reaper, are the strongest and most convincing arguments. Occasionally, by a few suggestions, the examiner will cause an applicant to double the amount of his insurance.

It is well for the examiner to remember that an applicant is never safely won until the policy is delivered, and the premium is safe in the company's coffers. Therefore, it is up to the examiner to be punctual in his appointments, and, if necessary, to go a little out of his way in order to make the examination.

At times an agent has a prospect, and feels

that if the examiner is along with him he can induce the party to take insurance. This is certainly a big factor toward the landing of his prospect, and if the examiner can consistently do so he should accompany the agent. The old axiom, "Strike while the iron is hot," is the secret of success in life insurance work.

4. What does the examiner expect from the agent? It is a well-known fact that a good life insurance agent will not willfully write what he knows to be a poor risk, thus preventing the examiner from having to perform the unpleasant duty of disqualifying the applicant. The good agent will see that the applicant is prepared to give a full and complete family history; he will see that the applicant is punctual and that he does not appear for examination with an empty bladder. I am proud to state that I have two agents on my lists who have rarely ever made it necessary for me to disqualify applicants for insurance, nor have I ever had to wait longer than the appointed time for their applicants.

In summarizing, I wish to emphasize the following points: Primarily, the examiner is the employee of the company; therefore, the benefit of any doubt should always be given to the company. He should give courtesy to the company, applicant and agent; he should be fair to all three, and prompt in all his appointments. He should assist the agent diplomatically to secure a good, though often reluctant risk. He should never disclose an applicant's name to another agent. He should never leave applications lying around where a rival agent may have easy access to them. He should turn all applications in promptly on completion of examination.

NOTE:—This paper is discussed with the other papers of the symposium, page 643.

CO-OPERATION OF MEDICAL DIRECTOR AND LOCAL EXAMINER.*

BY

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Bibliographers tell us that life insurance has been in vogue since the creation of man, and in a sense that is true; but it was the scholarly Paul, that inspired christian writer, in his first letter to Timothy, who gave the strongest injunction to insure and the greatest incentive for insurance the world has ever heard, when he said, "He who provideth not for his own household is worse than an infidel." All thinking men concur in that sentiment.

Such being true, life insurance has a dual nature and purpose, economic and spiritual. It then behooves us, both medical director and local examiner, to study from his every physical, social and moral angle, the applicant for insurance, that full justice may be given not only to the company, but to the applicant and his dependents as well. Added to this incentive to co-operation, we have another scriptural statement directly bearing upon the point, for we are told in holy writ, that "out of the mouth of two witnesses all things shall be affirmed," with these scriptural statements before us there should be no controversy as to the desirability of co-operation.

The duty of the local examiner is not alone to the company; the applicant also has rights to be considered. I would not have you infer from this statement that in recognizing the rights of the applicant the company's interest is in any manner jeopardized or prejudiced; indeed, the converse is true. Insurance companies are not altogether philanthropic organizations, for if dividends were not regularly declared such organizations would as soon dissolve as mists under a summer's sun. To maintain the permanency of these seemingly necessary business organizations, a steady accession of "parties of the second part" must be obtained. There is, there can be no other way.

So accurately have mortality statistics been calculated, correlated and tabulated, that the expectant period of life, at all ages, and under all the varied conditions and environments has been reduced, mathematically, to hours. This being true, all, or practically all men (and women) are entitled to life insurance of some form at some rate. To accurately arrive at just what that form and that rate should be, the local examiner should be able, and it should be his purpose to furnish to the medical director, a pen picture—with the perfectness of the artist's brush, not alone the physical findings and measurements (and by measurements is not meant those data ascertained in inches by means of a string) resulting from a careful, painstaking and competent examination, but the habits, environment and life of the applicant.

After such a picture has been transmitted to the medical director, and he has carefully reviewed it from its every angle and studied its every phase, as the art critic should, if in doubt about any point it is his duty, not only to his company but to the examiner and the applicant, and it should be his invariable rule and custom, to at once confer with the examiner in an effort to gain more complete information. Or if he does not concur in the recommendation of the examiner, he should at once confer with him, giving specific reasons for such nonconcurrence. I am very glad to state that most Texas Medical Directors, with whom I have dealings, do this; some do not. Time was when such co-operation was a rare exception.

*Read before the Section on Life Insurance, State Medical Association of Texas, May 5, 1915.

It is not given unto all of us to be as clear and explicit in our wording and painting as we should. A vital point may be vague and indefinite, or even ambiguous, and no medical director has a right to pass finally upon conclusions thus based, either favorably to the applicant or otherwise, without first consulting the examiner, in an effort to obtain more light on all doubtful or indefinite points affecting the risk.

We who have scaled the divide and are now sliding down life's decline live, in a great part, in reminiscences. I now recall numbers of hale and hearty men, men who even today offer good risks—for their ages, who were denied insurance more than twenty years ago; men whom I then believed to be good risks—the passing years have so proven—were denied what should have been and was their right, and yet not a word as to cause of rejection, although in several instances diligent efforts were made to obtain such information from the medical director. The fault might have been mine, or some other examiner's, in not making clear all findings, and probably could have been corrected then if there had been perfect co-operation between director and examiner. Such lack of full and free co-operation proves a detriment to the company, an injustice to the applicant and a material wrong to his dependents.

In my limited experience I recall instances where the medical director accepted, without question, statements of laymen as to the physical condition of applicants—their family tendency or predisposition, which statements were at variance with those of the examiner, and to the detriment of the applicant. Such should not be, and I believe we examiners would be recreant to our manhood, and would be derelict in our duty to our profession, if we submit to such treatment without remonstrance.

It is a fact that, as a rule, there is and naturally must ever be, more sentiment in the relation of applicant and examiner than exists between the medical director and the applicant. The latter merely looks at the paper, the pen picture drawn by the local examiner, and with an eye single to the securing for his company a first class risk only, and with the "none other need apply air," he renders his decision, favorable or otherwise, as his judgment dictates. While he may not so intend, his decision is made without contemplating seriously what an unfavorable report may mean to the applicant and his dependents. I concede without question, honesty of purpose to all medical directors; but is it not possible, yes probable, that such unfavorable decisions might not obtain—and without detriment or prejudice to his company—if further correspondence were had with the examiner? Is it not possible that in a certain per cent of cases, if such further conference or correspondence be held, some kind of insurance at some rate, might with perfect safety and profit to the company, be offered to the applicant?

So, while the medical director looks upon the application as a purely business proposition, the local examiner views it from a different angle. Although loyal and true to the company for which he examines, he has to consider at least an acquaintance, mayhap a patron and close personal friend, in whose personal and family welfare he feels a deep and abiding interest. Such feeling does not render him less fit to make a thorough and conscientious examination, with the one object in view, subserving the interests of all concerned. With such a feeling, he is better able to present to the medical director his pen picture. Such concern for the applicant should not and does not prejudice the interests of the company, but subserves it, in that a clearer report is made to the medical director, from which he arrives at his conclusions as to the merits of the risk.

A local examiner who would not truly paint is unworthy; and the medical director who fails at any time in dealing frankly and freely with his local examiner, is a misfit in the position he occupies. We local examiners are but human—and so are medical directors, and consequently liable to error. Each should prove a check to the other; each should be a help to the other; each is indispensable to the success of the company and the welfare of the applicant; each has his function, but inseparably connected and finally, each must do his duty to the company, the applicant and to each other, if the best interests of all are conserved.

NOTE:—This paper is discussed with the other papers of the symposium, page 643.

THE RELATION OF THE MEDICAL EXAMINER TO THE MEDICAL DIRECTOR.*

BY

M. B. GRACE, M. D.,

SEGUIN, TEXAS.

In the correspondence of our Committee on Insurance with the different life insurance companies doing business in Texas, with regard to the matter of medical examination fees, a number of companies favoring and paying the flat fee of $5.00, as demanded, complained that in some instances they were getting examinations that were absolutely worthless, and

*Read before the Section on Life Insurance, State Medical Association of Texas, Fort Worth, May 5, 1915.

EDITOR'S NOTE.—The author of this most excellent paper died July 26, after a brief illness. He was the chairman of the standing committee on Life Insurance at the time this paper was written, which fact gives his statement unusual weight.

that this was due in a great measure to the carelessness of the examiner.

These complaints were so frequent, and apparently so just, that in order to investigate the real situation I directed the following query to the Medical Director of each company doing business in Texas, and paying the $5.00 fee for examinations: "Will you please tell me what your principal difficulties are in regard to the carelessness of your examiners relating to medical examinations?" My purpose was, if possible, to bring these complaints before the examiners of this state, and by this publicity to incite greater care in not only medical examinations for life insurance, but in all medical work.

I feel that this is a delicate subject, and one that for obvious reasons no physician would care to handle; but inasmuch as I am in no way connected with any life insurance company, except as examiner and policy holder, and am at times probably guilty of all the sins to be mentioned, I feel that I may solicit my brother examiners of Texas to join me in an effort to give the companies $5.00 worth of examination for each $5.00 they pay us.

I have in my files 32 letters in reply to the above mentioned question. Twenty-two of these complain of incomplete information relating especially to personal and family history. One director says, "Carelessness has cost the life insurance companies more than ignorance or crookedness; a crooked examiner is very rare. So many examiners presume, because they see a man daily for years, and he has never been in bed sick, to make only a casual examination. * * * The applicant may have albumen, heart murmurs or incipient phthisis. * * * Few examiners seem to grasp what medical directors want. * * * We want all the information regarding the applicant, such as drinking, immoral habits, and living in unhealthful surroundings, or in houses with tuberculosis." Another says, "Carelessness always exhibits itself in one way or another, such as leaving questions unanswered or putting 'yes' or 'no' in answer to a question when the reverse answer should have been made, showing plainly that they are doing routine work instead of individualizing on every examination."

In reporting an illness, it is essential to give the director complete information regarding the date, duration, character and degree of illness, and the address of the attending physician. Many of these points are often only slightly alluded to, or are omitted altogether. It then requires correspondence to get correct data, with all the attendant delay and waste of nerve force, wire from the agent, hurry up invitations from the office force, gray hairs and premature crow's feet for the medical director, when a little, just a little, care on the part of the examiner would have made the current of life run smoothly for several people. Think, brother examiner, of 32 replies, 22 directors explicitly point out incomplete information regarding personal habits and history and family history, as the greatest deficiency of the examining force!

It is shown by 17 of these directors that omissions of answers to fixed questions is next in importance. One word covers this fault, and it should be written in letters of fire, until it is burned into the memory of the examiner—*Carelessness.*

Fourteen of these medical directors complain of urinalysis reported and not made. What name would you give this sin? I have not attempted to give it a name openly, and hesitate to do so, for fear that I should be too radical were I to attempt it.

Eleven refer to urinalyses carelessly made. For the examiner who has been guilty of this dereliction there is considerable hope; his conscience is not dead but dormant, and when he throws off the tyranny of routinism, which is a twin brother of carelessness, this will no longer be a subject of complaint.

Twelve of the directors refer specially to delays in replying to correspondence. We defend ourselves against this charge by saying that so often the information wanted is not to be had, owing to the temporary absence of the applicant from the city, or other good reasons, but this does not excuse us for not courteously explaining the situation in a short letter, and giving the medical director some idea as to when the information will be forthcoming.

Next is "failure to take exact weight and measure," and the same number complain of general carelessness. As these really belong together, it is unnecessary to attempt to separate them.

A medical director from another state says, "An examiner in your State examined a man this year (1914), stating that the man's height was 5 ft. 7 in. The same examiner examined the same applicant three years ago and at that time stated that he was 5 ft. 11 in., showing that a normal man, regarded as first class risk, had shrunken four inches in height during three years time. The doctor was placed on the list of inelligibles." This should teach us, brother examiners, to square our actions toward all mankind, and in self-defense to keep a careful record of all guesses and estimates for future reference.

Four refer specifically to carelessness, and but one to incompetency, in taking blood pressure. References are made by a number to carelessness in stating alcoholic history, erasures without initialing, illegible writing, back or advance dating of reports, neglecting to review reports after they are filled out, clerical errors,

and ditto marks and dashes, which mean nothing in the eyes of the law.

A very few directly refer to or call into question the integrity or honesty of purpose of any of their examiners; yet, disloyalty and carelessness are both frequently charged. In looking up these words in the Standard Dictionary, I find disloyal defined as follows: "Void of loyalty; not true to allegiance; faithless; treacherous." I wonder if these medical directors looked up this word before they used it. This is a serious charge against some members of the medical profession. I then turned to the word "careless," and found the following definition: "Having no care; heedless; incautious; negligent; unconcerned; inattentive; unmindful." Are these charges true? We, the examiners, are selected by the companies as their field representatives, to safeguard their interests. We are selected for the reason, first, that they believe in our integrity—no company would appoint a dishonest man, with a knowledge of his character, as examiner; second, our ability to examine an applicant and find out for them, and to notify them of any point, physical or historical, that might influence the character of the risk—the companies employ us to represent them, not the applicant; they and not the applicants pay us, and if we are loyal and honest we will represent our clients and dig out and give a conscientious pen picture of the applicant as we find him, and not as he would, or the agent might desire be found.

One director says, "We estimate that in 30 per cent of the examinations, letters have to be written to examiners regarding omissions of answers, or insufficient information. For instance, the examiner answers 'rheumatism,' not saying whether muscular, sciatic or inflammatory. He will record 'stomach trouble,' and not give an idea whether it was a belch, an ulcer or a cancer. So many say 'father or mother dead, don't know cause,' when one parent is living in the same town and the desired information could be obtained in a moment." Again, "50 per cent of the examiners record the pulse as 72, respiration 18, temperature normal, or 98.5°, urine 1020, acid, no sugar, no albumen. Now, any medical man knows something is radically wrong somewhere, when any large number of cases are thus recorded." The same director says, "There are many good examiners who love the work and do their full duty. 100 per cent improvement has been made in the last four years, which speaks well."

Another medical director, of one of the prominent Texas companies, after discussing carelessness, disloyalty and gross misrepresentations, says, "If I had my choice between the highly educated, accomplished man who was a rascal and the ignorant cuss who was honest, I would take the cuss." He also states that the service his company gets is much more satisfactory than formerly.

Another medical director cites an examiner who, after securing the family history of the applicant, asked him but one question, namely, the size of the waist-band of the pants he wore. This was sufficient information for him, from which to frame up a thorough examination. All blanks were properly filled out, including those for urinalysis.

Case after case of mal-examination is cited in these interesting letters, ranging in degree from the rankest rascality down to instances of ordinary carelessness. However, all agree that these conditions are passing and that the sun of conscience is gaining the ascendency and shedding rays of honest work, carefully executed, over our land. The days of the dishonest examiner are numbered, and they are but few, as the system of inspection recently instituted by many of the companies, will prevent the imposition of poor risks upon the companies, and show up the examiners. This sin will die when the light of publicity is turned upon it. The careless examiner will throw off his mantle of carelessness and will give the companies as well as his patients, all and more than they pay for.

As to the best methods to be adopted by the companies in securing results, I am not in a position to advise. Two methods, however, seem meritorious. One is an exchange list of dishonest examiners, the other is a card system showing how examiners are grading themselves, as was recently adopted, to great advantage, by one or more of our Texas companies.

One last word to the medical directors and I am through. You will never receive loyalty in the full sense of the word, from your medical examiners until you give them absolute loyalty. Your agents want their applicants passed. Your applicants want to be accepted. If Dr. B. makes you an honest examination and you reject the applicant, the next applicant is taken to Dr. C. and Dr. B. is reported out of his office. In this way you naturally drift from the good, honest man who is doing conscientious work, into the hands of the examiner who suits the agent. This is not an illustration of an isolated instance, but happened formerly with such frequency that it created a doubt in the mind of the examiner that you really desired an honest examination. Actions speak louder, or at least they are more impressive, than words, and when an examiner finds, after making and sending in a careful, honest and conscientious report, that he is supplanted by someone not so scruplous, and probably at the instigation of the agent, he naturally concludes that the medical director is insincere in his clamor for honest and efficient work. The

words "unavailable" and "out of his office," have been worn thread-bare in your agency reports, and seemingly you have closed one eye and winked with the other, when receiving them.

However, my experience, and that of other examiners, with whom I have conversed, leads me to believe that this attitude of the medical director is undergoing a rapid change for the better, although these instances continue to occur occasionally. We, the examiners, therefore are glad to report an improvement of at least 60 per cent in the fidelity of our corps of medical directors. I believe the time not far distant when both eyes of our medical directors will be wide open and their sensitive appreciation of honest work, carefully executed, will induce them to reward instead of castigating their medical examiners for this class of work. As long as your agents have any influence upon the selection of any part of your examining staff, just so long do you put a premium upon rascality. There is but one remedy. Get an examiner who is right and stick to him as long as he stays right.

Every director with whom I have conversed or corresponded upon this point, with a single exception, claims that both himself and his company are absolutely loyal to the examiner. Yet Mr. Director, the trick is somehow worked in your company. It will also continue to be worked until such a time as you demand, and enforce the rule, that all examinations be made by your regularly appointed examiners and refuse absolutely to make any change in examiners, regardless of the statements of agents, until you have made a careful personal investigation of any statements or charges made by the agent or other interested persons and find them true. Some of the most pronounced cases of injustice that have come to my observation have been dealt out by medical directors to their examiners.

In closing, I beg to say that, owing to the brevity of the time allotted for our papers, I have not been able to discuss other important points relative to the subjects. I respectfully submit for your kindly consideration, these few plain, homely truths, with the earnest desire that both the examiners and companies may be benefited.

ABSTRACT OF DISCUSSIONS.*

Dr. W. A. King of San Antonio: I want to emphasize one point Dr. Grace made in his paper, as to the loyalty of the company and the medical director to the local examiner. I tell you one way I have been working out that problem, a problem always hard to solve. I will illustrate by citing a case I had not long ago, in an applicant requesting a $10,000 policy, in what we call a border line case. He was not examined by our regular examiner. I did not know the examiner, nor could I learn much of his ability and integrity, so I rejected the applicant. The agent criticized, as you know they do always, and I said, "Now, it is possible you lost that applicant by not using the examiner fully conversant with our requirements. That was a border line case and if our examiner, whom I know and have confidence in, had examined the applicant and made the same report, he probably would have passed."

Now, that gets into their craws, when they have an applicant who looks good, rejected principally because he was not examined by the regular examiner. I cannot afford to take any chances on it. A border line case that is not handled by our regular examiner, will not be considered unless the agent himself is willing to have the applicant reexamined by the regular examiner, and pay for it himself, and they are coming to that pretty often now.

Dr. John L. Davis of Waco: I want to endorse what Dr. King has said. It is the custom of the Amicable, where an irregular examiner has been employed, to get a full explanation from the agent, as well as from our own examiner; and if the examination is not approved by our own examiner, the agent is charged the fee for that examination; the case will not be considered until regularly examined. There is absolutely no way of getting the best service from examiners except by establishing the most confidential relationship and co-operation between the medical director and the examiner in the field. For more than thirty years, I have been trying to do that in the companies I have been connected with. The only way to success is through the most frank, open and friendly relations between the home office and the medical man in the field.

One of the essayists, in a very able paper, urges the necessity and advisability of the medical director informing the local examiner fully as to the cause of rejection. Gentlemen, that is a good thing to do and we would be glad indeed if we could always fully discuss these rejected cases with the examiner; they have a right to know our reasons in almost every case. The knowledge of such rulings and the data on which selection is made by insurance officials, is instructive and educative to the examiners in a broad way. Sometimes, however, there is certain confidential information we can not properly send out of the office, obtained, possibly, from inspectors or private sources or from other companies.

We must always keep in mind that the local examiner is the very foundation stone of our insurance business; our success depends on his ability, his faithfulness, his diplomatic handling of the perplexing relationship involving the applicant, the agent and the home office. The examiner's work is full of responsibility and is often irksome and disappointing; we medical directors who have served a long apprenticeship as local examiners, can sincerely sympathize with him and we can surely appreciate the loyal, efficient examiner when we know him. It is right for the home office to deal frankly and openly with him; our functions are mutually interdependent; we should freely exchange ideas and information in order that our work may be satisfactory in the highest degree. A thousand times, when at my desk worrying over a border line case, I have wished the examiner were at my side, so I could get his viewpoint and he could get mine, so we might together give a judgment in the case that would be fair and logical.

Basing my opinion on a personal experience which has covered a medical selection of about four hundred millions of business and more than 200,000 lives, I say emphatically that only by maintaining the friendliest relations between the examiner and

*The four preceding papers are here discussed as a symposium.

the medical director, can we secure efficiency and keep our death rate down.

Dr. J. M. Ballew of Memphis: We are all aware of the importance of the confidential report, yet it is often the case that this report is given more credence by the medical director, than the physician's report. I know of such injustice being done recently, but the misrepresentation was learned of and further investigation made in time to prevent rejection of an excellent risk. Such reports place a conscientious examiner at a disadvantage unless full inquiry is made and opportunity had to verify such reports. I have been doing life insurance examination for twenty-four years and I don't think I would be exaggerating to say that two-thirds or three-fourths of the examinations in the companies I represent are made by physicians other than the regular examiners. The medical directors say they aim to stand by the examiners. Well, gentlemen, we don't take a man by what he says, we take him by what he does.

We all pretend to be honest, and I have striven to leave that heritage to my children, but I have been tempted more on insurance work than on everything else in the world put together. Agents who are my good friends take applicants to other physicians not regular examiners, and get them passed. That is bad enough, but to then have the medical director write me, the regular examiner, and ask about the applicant—if this is not cheek, I don't know what it is.

Dr. H. F. Connally of Waco: One complaint frequently made is that the medical directors do not give the local examiners the reasons for rejections. In many instances they can do that without causing trouble. Occasionally a medical director gets confidential information that the local examiner was not aware of, and a fine physical risk may have habits, morals or financial troubles, that constitutes a moral or speculative hazard, which the community generally does not know anything about. I have had such information come to me personally, and I have had the local examiner write me to know why we turned down such an applicant. It was information I could not impart; and while I believed it to be true, I was afraid I might get myself into difficulty, or my company into a lawsuit, if I divulged it.

Dr. Grace read a most excellent paper. The chief factor emphasized in his paper was neglect, and I believe that he is correct. Neglect or carelessness is responsible, in my opinion, in the majority of instances for the poor service we get. No longer than a month ago, one of the best physicians in central Texas, one who stands as well as anybody I know of, made an examination for our company and a few days later I learned that the applicant was not as tall by two inches as was given by the examiner. The agent was present when the examination was made, was in a hurry and assisted the examiner in getting through. So he measured the applicant, and stated that he was two inches taller than the figures given in a former examination. The examiner did not realize what this agent was "putting over." Being a heavy-weight, it made quite a good deal of difference with the company as to the height.

Holding the work down to regularly appointed examiners is quite a difficult problem at times. We may have two or three examiners in a place, and would rather have Dr. A. make the examination because of more satisfactory work, but he cannot be located and the agent gets another, possibly an alternate, to make his examination. This may be a border line case and Dr. A. is written and inquiries made along lines referred to by Dr. Ballew. I don't hesitate to do this in some cases, for having a higher regard for Dr. A's. opinion than I have for the other fellow's. I want his advice. Dr. A. may not be paid for the service, but he knows he is first choice and does the majority of the examining.

Now, as to grading examiners according to their work. With some examiners there is so frequently something lacking about their work that we would think that was the reason for his being selected to do the examining. The inspection report often reveals something that should have come out at the time of the examination. Again, comparison with previous examinations shows impairments not recognized or not reported by the examiner. I think there are very few medical examiners in Texas but who do capable work, but some get negligent and allow the agent to mislead them—explaining that these little insignificant conditions don't amount to anything, and the examiner so far forgets himself as to do the agent's bidding. He may get by with this once or twice, but when these things are repeated we naturally place a fellow in the grade he makes for himself and finally, if cast adrift, has himself to blame.

Dr. A. M. Curtis of Waco: A company cannot prosper without agents, and there is no company with good agents but wants to favor them. I don't like for a good man to go out and work weeks and weeks on an applicant and then turn him down. The agent is entitled to some consideration. This man is working for bread and butter for his family, and if he is an honest agent and we know him well, it will have weight with us; still, we have to stand guard over the company. We have to write our examiners for information. I think Dr. Ballew is entirely off; if a company that is putting $25 in his pocket every month, insisting on their agents going to him, writes to him about an applicant in the town, whom he knows, it is nothing but right for him to answer, even though he did not examine him I have told a few of our agents that they must pay for a second examination by the regular examiner. That is the only way I see to protect good medical examiners.

I wrote to an examiner about giving an applicant's height incorrectly, and he said, "I met him on the road one windy day and could not examine him very well, I was in my buggy and he was on horseback." Here was an examiner who drove out, met a man in the road, the man was on horseback, he in his buggy, and yet he said he had examined him. Certainly every medical director will discontinue the use of such examiners.

I used to think we had the crookedest agents in Texas, or anywhere in the world; when the Robertson law passed and the new home companies were organized, every crook in the business in the old states flocked in like black birds; they came from everywhere; they would do anything; many even examined the applicants themselves and signed a doctor's name to it. I have written for information in such cases only to find that no such doctor existed.

Dr. C. E. Cantrell of Greenville: I would not undertake to discuss this subject in the short time afforded, if it was not for a promise I made Dr. Grace. He said he would feel very much hurt if I did not take him to a cleaning. While I have been an examiner for life insurance companies for a good many years, my first public experience with them was to fight the original sinners in their effort to reduce the fee for examinations from five to three dollars. The work properly done is worth the price and the improvement in mortality in recent years evidences the protection afforded. It seems to me that the managers of all of our companies ought to be here this morning.

The man who goes out to sell life insurance has a hard time enough if he is dealing with an honest

competitor. Now, the agent occupies one side of the field and the examiner another. I want to assert again this morning, that the medical examiners of this country have always been honest, with very few exceptions. If they make mistakes, it is natural, but the fortunes that have been piled up by life insurance companies of this country prove always that the examiners are honest as a whole.

If I find what I think is a first class risk and the company turns it down, I never take any censure to myself. They have some other reason for it. I believe I am honest myself, consequently I am not looking for somebody to conclude that I did a dishonest thing.

Dr. W. P. Coyle of Orange: I think it is very kind of Dr. Grace to refer to these inefficient, if not incapable examiners, as being "careless," for it occurs to me that it is the same kind of carelessness that neglects to pay bills in everyday life. We know that there are a large number of men who are not honest, and doctors are men. As other gentlemen have stated, they may not intend to be as dishonest as they are; they may be temporarily dishonest; they may not admire dishonesty, but the man who will put definite specific gravity on a piece of paper just on a guess, who will show there is no albumen or sugar when no urinalysis is made, be he doctor, preacher or saint, is dishonest.

I would suggest this to the directors: if they will demand a specimen of urine sent with every application, regardless of age of applicant or amount applied for, the local inefficient examiner will do a correct urinalysis, or sooner or later, and most likely sooner, get caught in a lie.

If you will, at stated intervals, spend a little money among your examiners in a re-examination of your policy-holders, a splendid check can be had on previous examinations, and you will find many who have grown in a few years, or who have shrunken decidedly.

The insurance companies are among the few of our clientele who always pay us; we never have to ask for the money. I wish I could do nothing but make examinations from morning until night. As to Dr. Cantrell's statement in regard to the companies and their accumulating wealth, regardless of careless ways of poor examiners, it suggests to me, reasoning in the same channel, that if companies have hoarded money under such a wasteful system, maybe some day, with efficient examiners, insurance will get so cheap they will pay us to take it.

Dr. W. A. Boyce of Dallas: Some examiners jump on the medical directors pretty hard; probably some of them don't understand that the medical director is looked upon as a necessary evil, that must be endured by insurance companies. You must realize that many of our officers are former agents, and many of them fail to see the necessity of having the applicant examined at all. It is a constant fight between the agency department and the doctor in the field. We have to take your part all the time; but we cannot always hew right to the line, for we have to deviate sometimes to keep down fusses in the company's home office.

Dr. Scardino spoke of the family history of the applicant. Perhaps some do not know that among applicants from 19 to 29 years of age, with one parent and one brother or sister dead of tuberculosis, the mortality is 180 per cent, so it is very necessary to have all the information relating to family history, etc. In applicants from 29 to 35 years, with one parent and one brother or sister dead of tuberculosis, the mortality varies, according to weight, from 80 per cent to 130 per cent. After they pass 45, the mortality drops to 80 per cent; that is why it is so necessary to be careful regarding the family history.

Referring to Dr. Grace's paper, and speaking of carelessness. Out of our 1,500 examiners, I don't believe we have an incompetent one on our list; but we do have some very, very careless examiners. I believe I can safely say that carelessness among local examiners in Texas, costs the insurance companies of this state, at least two or three hundred dollars a day in stationery, stamps, hire of extra stenographers, etc.

Personal history is very important, and a local examiner should never disregard a history of previous sickness. An applicant may tell you he has been treated by a physician in the adjoining town for "biliousness," when lots of times it is syphilis, appendicitis, gallstone or some other disease that would have quite an influence on his mortality. Make inquiry and give date, duration, severity, and name and address of the attending physician; also palpate the abdomen or make other examination, and give us the details of your findings.

Speaking of grading examiners, I will state that the Southland keeps a card-system of every examiner; we can give you the name of the applicant examined, date of examination, how many omissions, how many mistakes, and when you have failed to find organic heart trouble, or failed to find albumen that we found later. If any of you want a record of your examinations, we can furnish you an exact copy.

Dr. T. D. Frizzell of Quanah: I have been doing life insurance examinations for many years and know there are lots of schemes worked by agents in getting applicants through. I recall an instance where a premium was placed on favorable reports by the examiner; and for what I hear it is not uncommon. The agent was going out in the country to write business and made arrangements with a young physician, who had a car, to take him along, with the understanding that for the risks that were accepted the examiner was to get an additional fee from the agent, of $5.00 each.

I have a notion that if I were a medical director, I would know that I had honest examiners and physicians with some experience, to represent my company, and I would want those whose time was worth the $5.00. Now, there are none of us but would be glad to make the five dollars, but personally I have many times made examinations when I would rather not have done it; my time was worth more than the five dollars.

In a town the size of mine, four or five thousand people, you don't need but one examiner. If he is an honest man and capable of writing an opinion on the applicant, he would also have judgment enough to select an examiner capable of making examinations in his absence and at the same time assume every responsibility for his work. If out of town for a few days, he could simply notify you or the agent that doctor so-and-so is a man whose examinations he would not hesitate to approve. Another thing that is some annoyance to the medical examiners is your lay information. I had an experience in that direction not long ago that was a little exasperating. I had been the family physician for eight years and had known the applicant intimately. I made the examination, reporting the condition of health and morals of the applicant and his three brothers. The medical director wrote me that they had information from reliable sources detrimental to the risk and asking me for further information on the subject. I had no trouble in convincing him that I knew the family intimately and that my former statements were true and his correspondent mistaken. They had confused the death of his father with a brother. This is often the class of information that you get from the laity. Again, one of these spotters asked me, "Did so-and-so get life

insurance?" I said, "I don't know; I examined him for it—why?" He says, "They wrote to the bank to know something about him, and we told them that he did not have sufficient money to pay the premiums,"—so they turned him down.

Dr. C. L. McClellan of Farwell: I do a good many life insurance examinations and I get the money promptly. I did fourteen the other day in half a day, for one dollar apiece, and gave them a dollar examination. The insurance companies get just what they pay for. The country practitioners, unfortunately, are not always prepared to give the companies what they should have for the money. Whenever you cut down the five dollar fee, you will cut down the value of your examinations. Instead of cutting down the fee, I would ask an increase of the fee in certain cases. If we had an additional fee of, say, only one dollar apiece, where necessary to make a blood-pressure test, then it would be some inducement for the country doctor to buy these machines, which he has very little use for outside of life insurance work. I further believe that if insurance companies would insist on a tuberculin test in every case where the policy is over five thousand dollars, or where the applicant is of tuberculous tendency, it would be inexpensive and would be the best investment that they could make.

I am always glad to have the retail credit men around; I don't wish to incur the ill will of any of my clients, so I can turn in an unfavorable report and lay it on the retail credit men—they don't know who they are, so they don't know who to kick to.

Dr. H. L. Wilder of Glenrose: From a professional standpoint I would not make a dollar examination, for the reason that right above where I sign my name is a certificate that I have made a thorough physicial examination, and I cannot make a thorough physical examination for a dollar. It is immaterial to me whether I make any life insurance examinations or not, and I will cite a few reasons why. Some five years ago, I had a man on my table, stripped, with his trousers to his knees; an agent stuck his head in the door to ask me a question. Afterwards he said, "Why did you have that man stripped that way?" I said, "I wanted to see him." Well, he says, "I never saw anything like it in my life." Not long after that a man came into the office to be examined and I found a cardiac murmur; it went into the report. The agent raised a big fuss. The applicant was a great big, strong, healthy, robust fellow, and you could not hear the murmur if he had his shirt on. The agent brought him to the Home Office, and paid his expenses, as I learned afterwards. The medical director turned him down, but that agent is still in the employ of the company, yet he wanted me to push that man through.

There should be closer co-operation between the medical director and the country doctor or examiner. An agent came into my office and wanted me to examine a man immediately. I couldn't do it. He remarked, "You cannot examine for us, that man is over age tomorrow and has to be examined right now." I told him I could examine him tomorrow. Would twenty-four hours make any difference in the examination? If it does, there is something radically wrong.

Dr. H. C. Black of Waco: We make an examination of a man and find he is a good physical risk, and we answer all questions; have we done our full duty then? I was referee for a New York company at one time and all examinations made in Texas came to me, to see if there were any omissions, etc. An examination by a good, reliable examiner come to me with the statement, "this man is worthy of a ten thousand dollar policy." Physically he was; he was a farmer and I have no doubt he was in perfect health, but I happened to know him. I knew that this man at home did not drink whiskey, but every time he came to our city, he would go down into the tough district of the town and stay there a week and was drunk from the time he got there until he got home. I wrote the facts to the company. Another applicant was recommended for insurance by an honorable man and capable examiner, who stated that he had an impediment in speech; the applicant said he drank very little. The examiner never saw the inside of a saloon in his life and he didn't know the applicant was drunk when he examined him; he saw him like he always appeared and thought it was his natural way. I wrote the company that the mayor of the town had told me that the applicant talked unintelligibly from drink, and he told me he was not only drunk then, but was always drunk. A man's morals and habits ought to always be considered.

Dr. Wm. M. Brumby of Waco: Dr. Jenkins states that a larger percentage of risks could be accepted, yet have good medical selection, if a more thorough investigation were made by the medical director. We have tables giving the mortality experience in a million of insured lives, and it would be suicidal for any insurance company to depart too far from these tables. The examiners haven't these figures before them, yet they would ask us to reconsider or investigate such cases. We cannot individualize, but must ask ourselves the question, would we accept 1,000 such risks? The experience of the past forces us frequently to say, no. None of the Texas companies are writing substandard business; young companies cannot afford it. They may have sufficient deaths the first year to knock out the profits on all the substandard business placed on the books for several years to come.

Approximately 80 per cent of applicants written by a good agent could be accepted by a stenographer in our office, and the "law of general average" would take care of the mortality very satisfactorily. Not so with the other 20 per cent, one-half of which anyone could reject; the balance are border line, and the acceptance or rejection of this small number can make or break a strong institution. The very life of the young company depends upon the savings in mortality. Rejections usually run from 8 to 12 per cent of the total business written. When a company once gains the reputation of being very lenient in its selection of risks it is soon deluged with substandard business, by not only its own agents, but agents of other companies. In which event the certainty of disaster increases greatly.

Dr. J. J. Cappleman of Honey Grove: The agent who seeks other examiners rather than the authorized one, can be countered by a little diplomacy. When an agent enters your town, give him a hearty handshake, tell him you are glad to see him; if he wishes to use your stationery and typewriter, all right; to make your office his headquarters; that any assistance you can render him, will be gladly rendered; that any orders that he leaves in your office will be attended to promptly. Don't allow the applicant to go to sleep. If you wait too long he may be out of the notion, and you would do the agent an injustice.

In case the applicant is rejected, or you see on close examination he is not a good risk, you can in a nice way smooth matters over for all concerned. Tell him that he does not want a dishonest policy that at his death his family will have to fight over in court in order to get it. Tell him to consult his family physician, possibly he can correct the trouble, in time, and then he can get an honest policy. Discuss it with them, you will not have so much trouble. I represent twenty-four old line insurance

companies, and am pleased with the work. We must be accommodating at times.

Dr. J. H. Florence of Houston: There is one point that has been raised that cannot often be satisfactorily settled, that of needing only one examiner in a small town. In a town of from three to five hundred people, there are usually two cliques—two banks and two doctors. Certain people would not take insurance to save your life if they had to go to the doctor of the opposite faction to be examined. If a man does business with one bank, he has to go out the back door, in order not to arouse the ill will of the friends of the other bank.

Regarding Dr. McClellan's suggestion about the blood pressure machines, I don't see how a man can practice medicine without a blood pressure machine. I do say the price of instruments is too high.

Dr. Cappleman strikes the key note in saying that when the agent hits your town, you might well afford to hunt him up, talk to him, make him feel good by showing him that you have the interests of the company (his interests) at heart. If he is not straight, get him straight; if he does not stay straight, write to the medical director, who is always glad to hear from you on any matter—the country doctor as well as the city doctor. I get better service, as a rule, out of the R. F. D. boys than I do from the city boys.

We have our troubles as well as you; for instance, one agent comes in and says, "I want to tell you something, I am going to quit writing life insurance." I say, "Why?" He says, "Twenty-five years ago you didn't require examinations on one thousand dollar policies, and never used the microscope under ten. You now have even a steam gauge to put on the applicant's arm, and the first thing you know, why God Almighty won't be able to build a man you people will take."

Dr. P. H. Scardino, in closing, said: Dr. McClellan objects to the repetition of questions in the application blank. The applicant sometimes tries to evade a question, and a repetition in another form often gets the desired information—and gets his goat.

I never saw an applicant, I think, but who told me that he never had an operation, never had an accident or illness of any kind, that was not caught by the next question. "When did you last consult a physician and why?"

Most agents are insistent. and want the examinations made immediately, but I have never found it necessary to turn them down flat. If we will turn such agents away with a kind word of explanation and convince them that you want to co-operate with them, yet ask their indulgence, you will usually hold his good will and make examinations invariably.

I have never had an agent get angry or fail to return with another applicant for me to examine because of having found albumen in his urine or a faint murmur. I refused to recommend an applicant once because of a heart murmur, but later this man applied for insurance in another company, was examined by the medical director of that company, and was accepted. The medical director of my company later acked me up about it, saying, "Doctor, you said you found a murmur in his heart, yet a certain medical director has accepted him. finding no such impairment, he says." I said, "Doctor, I am willing to stake my reputation, and my job as examiner for your company, upon my findings; I am willing for you to have any capable physician examine this man's heart, for I am confident he will corroborate my findings." This man was examined again and the murmur was found; but the other company is on the risk.

Dr. B. L. Jenkins of Clarendon, in closing, said: Were we all of one mind, we would soon drift into a very narrow channel and amount to little, and our patients soon find an early grave. I tried to emphasize in my paper that a large percentage of people are entitled to insurance. While the insurance company is not a philanthropic organization, it is strictly out for business and should be trying to give every one an equal break; if a man is entitled to insurance the company should give it to him. Dr. King turned down an applicant because he was not examined by his authorized examiner; he says that had his regular examiner given the same examination and turned in the same report, he would have accepted him. I don't think he did justice to the applicant or his company. The applicant has some rights in the matter. He should have required the agent to take the applicant to the regular examiner. I have frequently had medical directors with the right sort of regard for business demand that I re-examine in just such cases.

Dr. Davis said that confidential information could not be divulged. I examined an applicant for life insurance once and found nothing wrong physically or otherwise and recommended him unqualifiedly. I received advice from the medical director that he had " private information that this man has a tuberculous infection in his family, in fact he was infected himself." This was a stunner to me, he gave me a history of never having been sick a minute, and I failed to find any intimation of any such trouble. I found on close inquiry that there was a personal grudge against the applicant and from purely personal spite that report had gone in. If that inquiry had been withheld by the medical director a grave injustice would have been done that boy.

Dr. M. B. Grace closing, said: The sole purpose of our papers, it seems to me, was to elevate the standards in life insurance work and more loyalty on the part of the examiner, as well as the medical director. Families become divided, which is true in the family of medical directors of the state of Texas. These divisions are not now serious and if closer co-operation and a better understanding between directors and their staff can be had more uniform results will follow. Examinations should be from a purely business, and therefore a careful and conscientious standpoint. We should put our examination on paper; paint a pen picture for the medical director, as we find the applicant, not as the applicant and agent would have us find him. Be honest. Then, Mr. Medical Director, when the application comes into your hand, it is not our business whether you pass on affirmatively or negatively. But there is a question of loyalty from you toward those of us who are in the field, and unless we get that, the agent is standing directly in the way, and the company cannot blame us for poor medical selections.

Now, the question of eliminating the agent from this proposition and making this a family matter between the medical examiner and the medical director is for you to consider. When you have gotten to this point, the troubles will cease; whenever we are sure that we will receive absolute loyalty to the medical directors, I believe that I am correct in saying that the medical examiner will give absolute loyalty to the medical director.

Annual Session at Galveston, May 9th, 10th, 11th

THE USE OF VACCINES IN THE INFECTIOUS DISEASES OF THE EAR, NOSE AND THROAT.*

BY

R. E. MOSS, M. D.,

SAN ANTONIO, TEXAS.

The treatment of infectious diseases of the upper air passages with vaccines is comparatively of few years standing, and still in some respects experimental.

There are so many chances to commit error in obtaining specimens for the bacteriologist from which to make autogenous vaccines, and taking the country at large, so very few competent and trustworthy bacteriologists, that stock vaccines are largely used in a more or less haphazard fashion, without positive results, as a rule. It is true that the mixed vaccines, in many cases, give satisfactory results, but I find that they are more useful in procuring immunization rather than curing the average case. I shall not attempt to go into technical details, nor give a lengthy resume of the literature on the subject, I shall simply give my own clinical observations and report a few cases.

We find here as elsewhere in medicine that a correct diagnosis is a prime necessity; in other words, the germ or germs causing the disease must be identified. The so-called colds of our earlier years we now know were caused by one or more of a number of germs. The Bacillus septicus, Friedländer bacillus, influenza bacillus, staphylococcus, streptococcus, the pneumococcus and micrococcus catarrhalis. It is rather rare to find an epidemic caused by a single variety, and during the progress of a given case if repeated examinations are made one will find other germs added to those found at the outset of the attack.

The diseases that are amenable to vaccine therapy would include all of the acute and chronic catarrhs affecting the accessory sinuses, eustachian tubes, middle ear, mastoid, throat and lungs. When we consider the number of people afflicted each season with these diseases, the time lost, the complications that often become chronic and the deaths that result, one is impressed with their importance and the responsibility resting on us as physicians.

In former years it was my custom to diagnose these cases as colds or grip, depending upon the mildness or severity of the symptoms. Cases of the mild type are due to the B. septicus, and affect the nose and throat only, while the severer types are due to one or more of the germs mentioned above. It has been proven that one epidemic may be due to the influenza bacillus, another the staphylococcus and the streptococcus, and still others the pneumococcus, and so on.

To obtain satisfactory results, therefore, it is necessary to find what germ or germs is the active cause, and then a reliable autogenous vaccine can be made with some definite idea of what to expect from its use.

Before taking up the treatment, I would like to say a few words about prevention. The first requisite is free nasal breathing. It has been shown that the nose acts as a filter, and the individual whose nose is free from obstructions is less liable to attacks than the mouth-breather: if attacked the disease is milder and is followed by fewer complications, such as sinusitis, middle ear involvement and mastoiditis. All obstructions to free nasal breathing, therefore, should be removed, such as deviated septum polyps, adenoids and enlarged tonsils, or tonsils with diseased crypts. The narrow high arched palate is a frequent cause of mouth-breathing. Diseased teeth and gums also must be attended to and should be referred to a competent dentist. The digestive disorders due to faulty eating, over eating and improper food, lowers the individual resistance and is therefore of great importance.

Allen claims that the majority of people can be made immune to these infections by giving four or five doses of a reliable mixed vaccine in September and January. He advises rather large doses, if the first does not cause any disagreeable symptoms, but suggests that the patient should be quiet for twelve to twenty-four hours, and eat rather light meals. If this should prove to be true and could be put into universal practice, the results would be of incalculable benefit to humanity. My individual experience is limited to only a few cases, and is therefore of no practical value.

The object of treatment of any disease is to increase the individual resistance. We know that each patient recovers in this way, therefore, our efforts should be directed to give aid in every way possible.

I think the majority of physicians treating tuberculosis today regard tuberculin as almost indispensable, and yet if depended upon entirely it is practically useless. The same holds true in the treatment of the diseases under consideration. The therapeutic measures of known or proven value should be used and strict attention given to diet, hygiene, etc.

The initial dose of vaccine in a given case is largely empirical and depends upon the patient: that is, the age, physical condition and the microorganisms present. Allen says, that in the first few days of an attack the following doses would be safe to begin with, B. septicus, 50 million; M. catarrhalis, 2 million; M. paratetragenus, 25 million; pneumococcus, 25

*Read before the Section on Ophthalmology, Otology, Rhinology and Laryngology, State Medical Association of Texas, Fort Worth, May 6, 1915.

million; influenza bacillus, 50 million; B. of Friedländer, 50 million.

If a given dose in acute cases causes no reaction, we assume at once that it was too small, and rapidly increase the dose until the fever goes up from one to two degrees. This should be followed in twelve to twenty-four hours with a fall in the temperature, below that which it was before the dose was given, and general improvement with increased appetite. The frequency of repetition depends largely upon how the patient reacts following each dose, and varies from two to eight or ten days. Whether the dose should be increased or not depends entirely upon the local or sytemic reaction.

In chronic cases the doses are much larger because the effects are less positive than in acute cases. In chronic sinusitis and empyema of the accessory nasal cavities, it is necessary, as a rule, to resort to surgical measures and daily lavage. The absorption of poisons or toxins in these cases has so lowered their resistance that our patience and ingenuity will often be taxed to the utmost before obtaining favorable results.

The effect in some cases are truly magical, while in other the results are very disappointing. These disappointments, as a rule, are due to some new germ invading the tissues, and therefore requires repeated examinations of the secretions and the preparation of fresh vaccine.

CASE REPORTS.

Case 1.—Miss K., age 22. I was requested to see this patient by Dr. Paschal, January 2, 1913. She had been suffering from a rather severe attack of grip. Both ears became involved, and a few days later both mastoids. I found her suffering a great deal, with a temperature of 102.5°, and a profuse discharge from each ear. There was marked swelling, great tenderness and pitting on pressure, over each mastoid. She looked prostrated, sallow and almost jaundiced. Culture from the discharge of each ear showed the streptococcus. The first dose of vaccine was given January 4th, and was followed by an increase of all clinical symptoms. On the next and succeeding days, however, there was a gradual fall of temperature and general inprovement. The doses were repeated every four or five days. The patient came to my office on the 15th, just 13 days from the time I first saw her. At this time she was free from any symptoms of disease, and her hearing for the watch was A. D. 12/36, A. S. 6/36. I treated her ears for a month and then saw her occasionally until March 28th, the hearing at this time was A. D. 36/36, A. S. 28/36.

Case 2.—M. S., age 16, student. Consulted me about an acute suppurative otitis media, naso-pharangitis and bronchitis. The attack was ushered in with a violent chill, and in six hours there was a free discharge of sanious fluid from the right middle ear. I obtained specimens from the ear, nose, pharynx and sputum, all of which showed pneumococci in almost pure culture. At the time of the first dose of vaccine, two days later, his temperature was 102.5°. The discharge from the ear was becoming more purulent; there was tenderness over the tip of the mastoid, violent paroxysms of coughing, attended with pain throughout the chest and larynx, and expectoration of a thin rust colored sputum. There was no distinct crepitation in either lung, but diffuse rales every where. Four hours after injection of the vaccine he had a chill, and his temperature went up to 104°, but dropped slowly to 99° in eighteen hours, with almost entire disappearance of all symptoms. At the end of four days he came to my office for the second dose of vaccine, and two days later returned to school fully convalescent.

Case 3.—Miss T., age 26. I saw this patient at my office August 1, 1914. She came to see me on account of chronic naso-pharyngitis, laryngitis and bronchitis. She had been treated at home by two well known specialists, and the family physician, for more than four months. She looked anaemic, with a slight hectic flush. Her temperature was 99°-101° each day, and there was a harsh, explosive cough with rather thick tenacious mucous. Specimens taken from the naso-pharynx, pharynx and larynx, showed streptococcus almost in pure culture. I failed to mention that this patient was having night sweats. I had her to live out on a screened porch with a diet of milk, eggs, beef steak, hard toast with butter, cooked fruits, etc. I also put her on an iron tonic and gave aromatic sulphuric acid at bedtime for the sweats. The first dose of vaccine was given on August 3rd, and repeated every fifth day. The improvement in this case was most satisfactory; at the end of the month she had gained twelve pounds, and there was no longer any evidence of her trouble. She returned home and I heard from her occasionally for three months. She remained quite well.

I have reported these successful cases to show what can be done. I do not wish to mislead you with the idea that all of my cases terminate so favorably. I am rather enthusiastic, however, with this plan of treatment. I have not operated on a single case of acute mastoiditis in over two years, where the patient came under my care at the onset of the trouble. There were a number of cases that in former years I would have operated on but now, by the continuous application of ice over the mastoid and with autogenous vaccine, they have all recovered.

HEXAMETHYLENAMIN IN DISEASES OF THE EAR, NOSE AND THROAT.*

BY

C. B. WILLIAMS, M. D.,

MINERAL WELLS, TEXAS.

Hexamethylenamin has been in use as a drug since 1894, its principal application until recent years being as a urinary antiseptic. It is made by the action of ammonia on formaldehyde, and its antiseptic value depends upon its decomposition in the system with the consequent liberation of formaldehyde.

In *The Journal of the A. M. A.*, (April 20, 1912, Therapeutics, Hexamethylenamin U. S. P.), we find the following as to the different

*Read before the Section on Ophthalmology, Otology, Rhinology and Laryngology, State Medical Association of Texas, Fort Worth, May 6, 1915.

organs and membranes which have been found to excrete the drug when taken into the system:

"While just what becomes of the whole of the hexamethylenamin in the body has not been determined, it is known to be largely excreted in the urine, and has been found in the blood, in the gall-bladder, in the pancreatic juice, in the middle ear, in the serous fluids of the cerebrospinal axis, and it has lately been shown that it is probably excreted into the various mucous membrane cavities or sinuses associated with the nose and throat. It has been shown that it is excreted into the pleural cavity, and into the synovial fluid of the joints (Crowe: *Johns Hopkins Hosp. Bull.*, 1908, xix, 109, and xx, 102), and into the sputum of patients suffering from bronchitis, pneumonia, pulmonary tuberculosis, and even asthma (Armstrong and Goodman: *The Journal A. M. A.*, May 27, 1911, p. 1553). Its value lies in that it breaks up in the tissues and thus formaldehyde is liberated."

It will be observed that if there is sufficient liberation of formaldehyde under the breaking up of hexamethylenamin in the system, to make it of such unquestionable value as a urinary antiseptic, and since the liberation seems to take place through the middle ear accessory nasal sinuses, sputum and bronchial mucous membrane, it should also serve to at least retard bacterial activity in these parts.

Following an article which appeared in *The Journal A. M. A.*, February 3, 1912, by Dr. Vanderhoof of Richmond, Va., entitled "Hexamethylenamin in the treatment of Bronchitis," in which he gave his experience with the drug in the treatment of acute colds and the bronchitis which so often attends or follows them, I decided to give it a systematic trial in selected cases of this kind.

It was further suggested to me in this and other articles published about this time,[1] that since there is excretion of the drug through the mucous membrane of the nasal accessory sinuses and middle ear, it should be of service in acute infections of these cavities. Fullerton[1] stresses that the greatest effect of the formaldehyde content is obtained in those localities where there is more or less stagnation, which allows more thorough decomposition. This again appealed to me as a good reason why the sinuses and middle ear offered a good field for effective usefulness of hexamethylenamin.

Up to the time of and including the articles mentioned, I had seen nothing further than the statements that hexamethylenamin is excreted in these different localities, and have not since noticed any reports from those who have been using it in these particular cases, though no doubt some have been published by this time.

I began in the spring of 1912, the systematic use of hexamethylenamin, to the exclusion of other internal medication, in every well defined case of acute cold, acute suppuration of the middle ear, acute sinusitis and acute bronchitis, coming under my care. My attention was particularly given to acute colds and middle ear suppuration, since these constituted the greater number of my cases.

The results of this treatment seemed to be of such marked value that in the following Fall, I extended the scope, giving hexamethylenamin as a routine in all cases or threatened infection of the sinuses and middle ear.

My experience was so gratifying that I have since continued its use as a routine practice in all such cases, for the following reasons:

1. I believe that if taken early and in sufficient quantities it will abort or materially lessen fully 75 per cent of the acute colds.
2. In aborting or minimizing these colds, the danger of sinus or middle ear complications is likewise equally reduced.
3. Many cases of threatened suppuration of the middle ear can be aborted.
4. When suppuration has taken place in the sinuses or middle ear, I believe that the duration of discharge is positively cut short in the great majority of cases, thus creating less destruction of tissue and reducing the danger of mastoid involvement in ear suppurations.

I do not want to appear over enthusiastic on this subject, but my results have been so uniformly gratifying during the past 3 years, that I feel that the drug should be more generally used in these conditions.

I am thoroughly convinced that I have seen many cases of threatened suppuration of the middle ear cut short of pus formation through its early use. At first I was astonished a number of times to have patients return to my office 24 hours after beginning the treatment, with all symptoms very much abated, whereas I had expected to have to evacuate pus at that time. It is true that many of these cases would, no doubt, have improved under ordinary care, but I do not think so of the great majority of them.

My experience has been limited almost exclusively to acute cases. I can say little as to its value in chronic cases.

The earlier in the disease the drug is given the more positive will be the results. I give my adult patients from 15 to 30 grains per day for from 3 to 10 days, beginning with an initial dose of 10 grains, followed by 5 or 7½ grain doses.

In rare instances there will be complaint of irritation of the bladder. I caution the free drinking of water, and should such symptoms appear, I advise leaving the medicine off temporarily.

ABSTRACT OF DISCUSSION.

Dr. John H. Foster, Houston, said: A Committee of the A. M. A. reported a few years ago that

1. Therapeutics, Hexamethylenamin, U. S. P., *The Journal A. M. A.*, April 20, 1912; Fullerton: Hexamethylenamin, *The Journal A. M. A.*, January 13, 1912.

hexamethylenamin was of no value as an antiseptic except in the urinary tract, and then only when the urine was acid and that the idea that it had value in the ear, nose, throat and other parts of the body was fallacious. However, as a result of clinical observation, I am firmly convinced that it is of value in infections of the ear, nose and throat. I feel sure that full doses will cut short an acute cold in myself. The action of this drug is not the same, apparently, in all individuals. The reason for this I do not know.

Dr. Williams, closing, said. Regardless of the chemical analysis made by the laboratories of the A. M. A., I shall continue the use of this substance in infectious diseases of the eye, ear, nose and throat, because a clinical proof of its value in my hands has been sufficient. The A. M. A. report that there is not sufficient elimination of formaldehyde from hexamethylenamin to be of much value, did not come out until I had proven to my own satisfaction that the drug is of great value in these cases, no matter how empirical the treatment may be.

DEPARTMENT OF EXTENSION

THE EXTERMINATION OF TYPHUS DEPENDS ON THE EXTERMINATION OF LICE.

The following circular is being sent out by Dr. C. C. Pierce, Senior Surgeon of the United States Public Health Service, on duty on the Texas-Mexican border:

Typhus is a serious disease, giving a death rate of from 8 to 30 per cent.

Typhus is contagious, the contagion being transmitted only by lice that have bitten a person sick with typhus fever and later bite a well person. The body lice, or white lice are the most dangerous.

As is it not possible to know which lice are infected with typhus. all lice should be killed.

Persons sick with typhus are not dangerous, if they have no lice on their bodies.

All persons should keep away from one sick with typhus in order to avoid the bites of lice.

Convalescents from typhus fever are not dangerous 36 hours after their temperature returns to normal, and need not be quarantined.

The extermination of lice means the extermination of typhus.

Avoid association with all dirty people who may carry lice.

It is unwise to visit moving picture shows, club rooms and dance halls, unless all the persons present have been freed from lice.

The methods of killing lice are very easy, on account of the fact that the lice only live in contact with human beings on whose blood they feed and in whose clothes they live and deposit their eggs.

If a person infested with lice develops typhus fever, he should be thoroughly disinfected, by having his hair clipped short and the body bathed with hot water and soap. All clothes should be boiled or destroyed by burning, care being taken that no lice that might be on the clothes escape.

In order to rid a person's head of head lice, the hair should be soaked with a mixture of equal parts of kerosene oil and vinegar, covering the head with a towel for about one-half hour. The vinegar loosens the nits and the kerosene oil kills the adult lice. After one-half hour the head should be thoroughly washed with soap and water. Where the hair is very thick and there are many lice, more than one application of this remedy is necessary, as all lice will not be killed by the first application.

In cases of children or men infested with head lice, it is best to clip the hair with No. 00 clippers, and then wash the scalp with soap and water. This will be sufficient. The hair removed should be collected on a newspaper, rolled up and burned.

All persons infested with lice should be required to undress and all clothing worn by them boiled for 5 minutes. This means retained in the water after it starts to boil for at least 5 minutes.

While the person is naked he should be made to take a bath with warm water, if it can be obtained, and use plenty of ordinary soap; or bath with gasoline, or vinegar and kerosene, equal parts.

Clothing that is boiled once each week, will remain free from lice. Ironing clothing will also kill lice eggs that have been attached to the seams and folds of the garments. A person that bathes 2 or 3 times a week, and keeps his body clean will not become infested with lice, if he will change his underclothes at least once a week, and wear only underclothes that have been boiled when they were washed.

CARE OF THE NEWBORN.

Immediately after birth, the baby is wrapped in a warm sterilized "receiver" or soft cloth and turned over to a nurse, relative or neighbor. A piece of sterile gauze is laid over the stump of the umbilical cord at the navel. Olive oil or vaseline is used for anointing the baby, and the skin wiped gently with a soft absorbent cloth. The first bath should not be given until ordered by the physician. Talcum powder is not needed as long as baby's skin remains dry and smooth. It may be used when the skin is moist, chafed, or if there is any prickly heat.

The baby should nurse as soon as mother awakens after her first nap. Then it should be put to the breast every four hours until the milk appears; after that, every two or three hours during the day, from 7 a. m. to 10 p. m., according to the doctor's instructions, and once or twice through the night.

Talcum powder and a piece of sterile gauze should be applied daily as a fresh dressing to the navel, until it is completely healed. The dressings are held in place by the band. After the healing of the navel, the abdominal band is worn, up to an age of six weeks.

Baby's eyes should be cleansed by simply sponging the outside of the lids with boiled water, unless there are signs of inflammation, in which case the physician should be consulted for special instructions. The baby should be kept protected from excessively bright light, in a room at a temperature of 68 degrees to 72 degrees Fahrenheit.

If the bladder is not emptied in 12 hours after birth the physician should be notified. The bowels should act in the first 24 to 36 hours. The baby's breasts may swell some. Do not touch them without the doctor's advice.

The baby's weight should be taken and recorded daily on the chart which the doctor will supply for that purpose.

Young mothers should remember that crying is the baby's exercise and they should not take the baby up and jog it each time it cries. Give no medicines, "sugar teats," or toddies to the baby without the doctor's advice. Try to educate the baby to lie quietly in its own bed until it falls asleep, and to take its nourishment at regular intervals.

DO YOU KNOW THAT

Four per cent of the inhabitants of certain sections of the South have malaria?

The United States Public Health Service has trapped 615,744 rodents in New Orleans in the past 18 months?

The careless sneezer is the great grip spreader?

Open air is the best spring tonic?

Typhoid fever is a disease peculiar to man?

Measles kills over 11,000 American children annually?

There has not been a single case of yellow fever in the United States since 1905?

There is no Federal institution in the continental United States for the reception and care of lepers?

Plague is a disease of rodents?

Malaria is spread by a special mosquito?

House screening is a good disease preventive?

Fingers, flies and food spread typhoid fever?

Pellagra may be prevented or cured by proper diet?

The United States Public Health Service believes that the common towel spreads trachoma, a disease of the eyes?

Children from sanitary homes advance more rapidly in school than those from dirty premises?

MISCELLANEOUS

THE UNITED DOCTORS AND THE ITINERANT TAX.

EDITOR THE JOURNAL: About March 1st, a layman brought to my attention an advertisement in one of our county papers, announcing through more than a half column, headed in bold faced type, that the "United Doctors" would be in Bay City, March 15th and until the 16th, at which time they would offer to the sick and afflicted public the highest medical skill, and that medical service would be free of charge. "Prominent American Physician Specialists," it was announced to a gaping world, leaving the impression, no doubt, that they would be hastening by from some God-inspired mission elsewhere and were stopping off to stage the Good Samaritan —ass, inn, Levite, etc., thrown in.

It didn't take but a few minutes to hunt up two copies of *The Journal of the American Medical Association*, dated March 1st and August 9th, 1913, respectively, in which were found two excellent write-ups of this concern. Armed with these and the advertisement in question, I called in consultation the county attorney, and together we formulated plans for the undoing of the "United Doctors." Frequent conference resulted, to the end that when the morning of the 15th dawned all was ready for the opening and closing of whatever there was to be opened and closed. Early in the day a suave, wise looking individual, apparently of the masculine gender, bobbed up in the district clerk's office and registered as Dr. Wm. D. Rea, certificate No. 8994, on verification, May 20, 1912. He gave as his residence Harris county; he was 50 years of age —born October 14, 1865. I got the information a few minutes later from the clerk, who was co-operating with us.

It looked a little bad for our side of the case, but we caught a towline trailing aft and swung on. The tax collector was accordingly interviewed to ascertain if a certain Dr. Rea had paid his itinerant doctor's tax. He had not. Ah, that was interesting! We thereupon sent a young man over to the United Doctors for treatment. This young man is a school boy and has been living with me for three years. During that time he has not had a day's sickness and was examined for life insurance two months ago and found normal in every respect. The United Doctors concern fastened upon him some terrible affection, from which he could not escape except by the route which they mapped out, and it would cost him $20 per month for three months to get as well as he was before he came in. The young man, acting on a preconceived plan, left his medical adviser, ostensibly to get the money for the first payment, and went direct to the office of the county attorney.

The result was that Dr. Rea a little while later answered a rather peremptory summons to appear in court and when the finish came, which was in the form of a plea of guilty, he was relieved of $85.70, together with a promise, made to the county attorney, to discontinue business instanter and leave town on the first north bound train, which he did.

I am sending the data furnished by this man Rea's registration certificate, together with one of the advertisements clipped from a county paper, to the secretary of the Board of Medical Examiners to try to ascertain why his license should not be revoked.

S. A. FOOTE, M. D.

Bay City, Texas, March 16, 1916.

SAMUELS LOSES—THE PUBLIC WINS.

The Wichita *Eagle* for February 29, 1916, chronicles the fact that the United States Court of Appeals has confirmed the conviction of "Prof." Henry Samuels of Wichita for using the mails to defraud. Readers of *The Journal of the American Medical Association* will remember the Samuels case. As long ago as 1910 it called attention to the outrageous swindle that this man was perpetrating on the sick in selling as a cure for practically every disease a mixture of sugar and salt in hydrant water. Later, *The Journal* gave the public the facts regarding Samuels' attempt to re-establish his mail-order business at Detroit. The Michigan city made it so warm for this individual that he went back to Wichita. In 1914 the postoffice officials proceeded against Samuels for violating the postal laws in obtaining money through the mails by means of false and fraudulent pretense, and on June 1, 1914, Samuels was denied the use of the mails. At the same time Samuels was indicted by the federal grand jury on criminal charges connected with this fraud, and later found guilty. On March 4, 1915, he was sentenced to serve one year and one day in the federal penitentiary and to pay a fine of $5,500. Samuels appealed, of course, but, according to the Wichita *Eagle*, the Appellate Court has confirmed the findings of the lower court. The Samuels case is reprinted in the pamphlet "Medical Mail-Order Frauds," price 10 cents, published by the American Medical Association.

THE TECHNIQUE IS QUITE SIMPLE.

Surely, we know that you are busy, Doctor. But it takes only two minutes and nine seconds, and it is vital to the future of organized medicine in Ohio.

We tried it, and we know.

See if you can do it as quickly. Follow the technique.

Sit firmly at your desk, pen in the right hand.

Remove check book from pigeon hole.

Write out check. Blot, and fill in stub.

Fold, and enclose in an evelope.

Inclose a line on office stationery saying that you are sorry that you hadn't sent it January 1.

Address envelope to the Secretary-Treasurer of your county society.

In Columbus, by January 20, forty-five per cent of the 300 members of the Academy had paid their dues. Many of the balance have paid by this time. This prompt action leaves the officers free to devote their time to building programs that will be worth while.

Help make this possible in your county by sending in a check for your dues.—*The Ohio State Medical Journal.*

Come In, the Water's Fine.

GALVESTON

To the Members of the State Medical Association of Texas, Galveston extends hearty and sincere greetings; she will welcome them with open arms, May 9-10 and 11.

The habit of "pointing with pride" has lately been frowned upon "in the best circles," but Galveston, nevertheless, does point with pride to the fact that the State Medical Association of Texas is again to be her guest during the month of May, and special plans are being made to show its members and guests a time that will linger pleasantly in their memory for years to come.

Being constantly fanned by the heavily salt laden sea air, Galveston has been strongly endorsed by the medical profession for its beneficial effect in malaria, hay fever, insomnia and kindred maladies.

Galveston extends to the State Medical Association the use of her magnificent municipal building, which has recently been completed and contains an auditorium capable of seating 5,000 persons, a stage

Tremont Hotel: Hotel Headquarters.

Registration; Information Bureau; Scientific and Commercial Exhibits; Hall No. 2, House of Delegates.

capable of accommodating several hundred, and a building considered the finest and largest of its kind in the Southwest. For the various section meetings, places of convenience and ample space have been provided.

Galveston combines in the fullest measure all the attributes of the convention city perfect. Nature and man have combined to create a garden spot

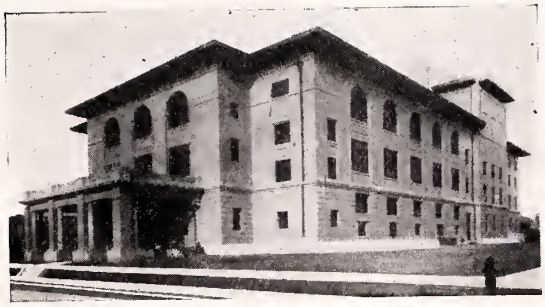
Hotel Galvez: Seawall, Boulevard and Beach.
Alumni Banquets and other Entertainments.

where business, recreation and just plain old fashioned "loafing," can be pursued with the most delightful results. Here the summer heat that makes perspiring misery for the attendant upon business sessions of a convention, is tempered by constantly stirring breezes from the Gulf of Mexico, and when the business sessions are over, here will be found the finest surf bathing in the world, together with a varied program of interesting sight seeing and wholesome outdoor recreation that cannot be surpassed in the Southwest.

The chronicles of Galveston are vastly different from those of the average city. The history of the Treasure Island runs back through the early days

of the buccaneers of the Spanish Main and as its scroll is gradually unrolled, up to the present time, the lights and shadows of history-making events are inextricably blended with the events of commercial history; for Galveston is one of the "story-cities" of the United States.

The members of the State Medical Association visiting Galveston during the 1916 session, will find much worth seeing. They will see the water front, over which passes the foreign and domestic commerce of the great West and Southwest; the modern docks and terminals, which have helped Gal-



City Hall.

Hall No. 1, Public Health Meeting, all General Meetings, Section on Medicine and Diseases of Children, Section on Surgery.

Hall No. 3, Section on Ophthalmology, Otology, Rhinology and Laryngology; Section on Life Insurance.

Hall No. 4, Section on Pathology, Section on Gynecology and Obstetrics.

veston to be the greatest cotton port in the world, a port alternating with one other city as the second greatest port in the United States in the volume of exports and imports, and a port which handles more foreign commerce in a year's time than all of the United States Pacific coast ports combined.

They will visit the State Medical College—the Department of Medicine, University of Texas—which is one of the "Class A" schools of the United States; the John Sealy Hospital and St. Mary's Infirmary,

Y. M. C. A. Building.

Hall No. 5, Section on State Medicine and Public Hygiene; State Association of County Secretaries.

both of which should be of special interest to the medical profession, the former being used for clinics by the medical college.

They will see a magnificent five mile concrete seawall costing over $1,500,000, which structure during the month of August, 1915, saved Galveston from annihilation by a West Indian hurricane; a bulwark of the city which held the death rate in the city of Galveston during the Texas coast storm down to 11, while the deaths in cities as far north

Rosenberg Library.

as East St. Louis, caused by the same hurricane, were three times that number.

While there could be enumerated many more advantages of Galveston as a health resort, pleasure resort and convention city, it will perhaps suffice to say that Galveston's attractions are well and favorably known to those who have previously visited the city. For those making their first visit to Galveston, and it being possible some who have attended previous conventions, but who did not know of all the attractions, there is given below a synopsis of the principal points of interest in and around the city, with suitable illustration.

A Typical Galveston Street.

Fort Crockett occupies 124 acres, situated in the western section of the city, adjoining the seawall. It is the present home of Company 127, United States Coast Artillery. Visitors are permitted the freedom of the reservation during the day.

Fort San Jacinto is situated east of the city, one mile from the seawall, and at the extreme eastern end of the island. Plans are being completed, involving an extension eastward of the seawall to encircle the San Jacinto reservation and join the present wall at its northern extremity. This will mean the development of miles of additional wharfage and the reclamation of 2,500 acres of land.

Fort Travis is situated on the mainland, northeast of Port Bolivar. It commands the entrance to Galveston Bay and harbor. It is reached by launch to Port Bolivar, and a short walk from that place.

The Seawall and Boulevard stretches five miles along the edge of the gulf waters, from the northeastern extremity of the city to the western end of Fort Crockett Military Reservation, built at a cost of millions, by the city and county of Galveston. The wall is a monolithic mass of reinforced con-

crete. Take east or westbound Twenty-first and Twenty-fifth, eastbound Thirty-third and Depot, or

Medical Department University of Texas.

westbound Thirty-third and Twenty-second street cars.

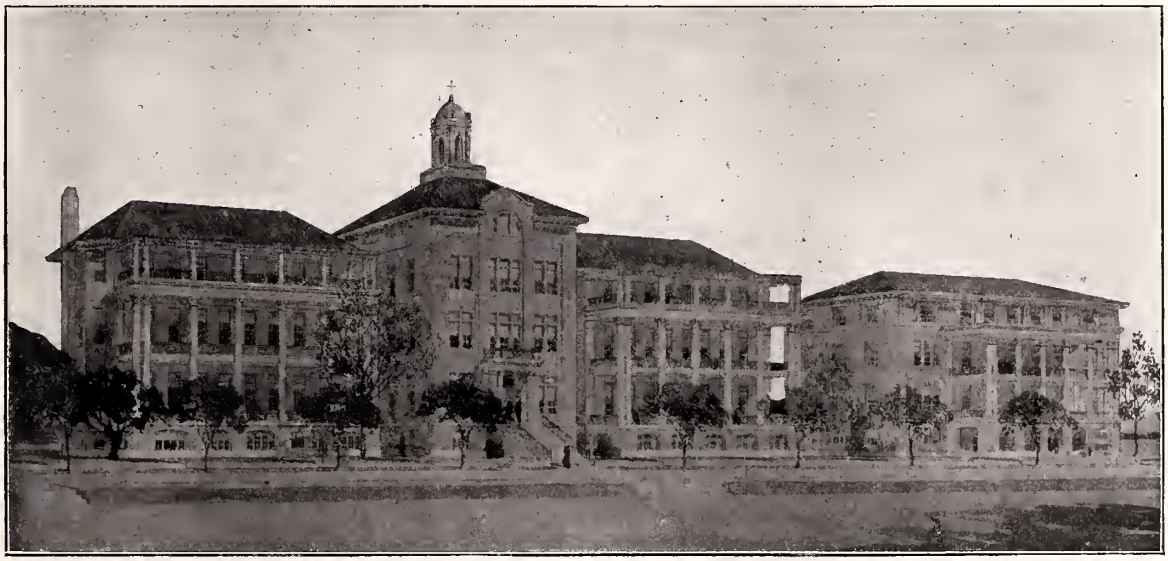
veston's marvelous natural water facilities. Visitors should note the system of covered cotton sheds strangely native to Galveston.

The State Medical College is situated between Ninth and Tenth Streets, on Avenue B. This is the Medical Department of the University of Texas, and its student body averages 250 annually. Take eastbound Market Street cars, alight at Ninth Street and walk two blocks north.

The John Sealy Hospital is situated on Avenue B, between Ninth Street and the Seawall. It is reached by eastbound Market Street cars. Alight at Ninth Street and walk two blocks north. It adjoins the Medical College.

St. Mary's Infirmary is situated at the corner of Eighth Street and Avenue D. Take eastbound Market Street cars and alight at Eighth Street.

Hotel Galvez, corner Twenty-first Street and Boulevard, was built at a cost of $1,000,000, by popular subscription of Galvestonians, ranging from $50,000 to $100. It stands where ocean-going vessels entered the heart of the city during the grade raising work. Take eastbound Twenty-first and Twenty-fifth, Thirty-third and Depot, or westbound Twenty-



John Sealy Hospital: Woman's Building.

The Breakers Bath House is situated on the Boulevard at Twenty-third Street. It is open day and night, every day in the year. Take east or westbound Twenty-first and Twenty-fifth, eastbound Thirty-third and Depot or westbound Thirty-third and Twenty-second Street cars.

The Crystal Joy Palace is situated at Twenty-third Street and Boulevard. It is a bathing pavilion and amusements center, and is open the year around. Take east or westbound Twenty-first and Twenty-fifth, eastbound Thirty-third and Depot or westbound Thirty-third and Twenty-second Street cars. Alight at Twenty-third Street.

The Wharf Front is within easy walking distance, north, of all depots, the downtown district and hotels. Galveston's system of piers is unsurpassed. Here the ocean freighters of ninety different steamship lines receive their cargo for the important ports of the world. Cotton ready for loading, and being loaded, may be seen at all times during the year. The wharf front affords a good view of Gal-

first and Twenty-fifth, or Thirty-third and Twenty-second Street cars.

Saint Mary's Infirmary.

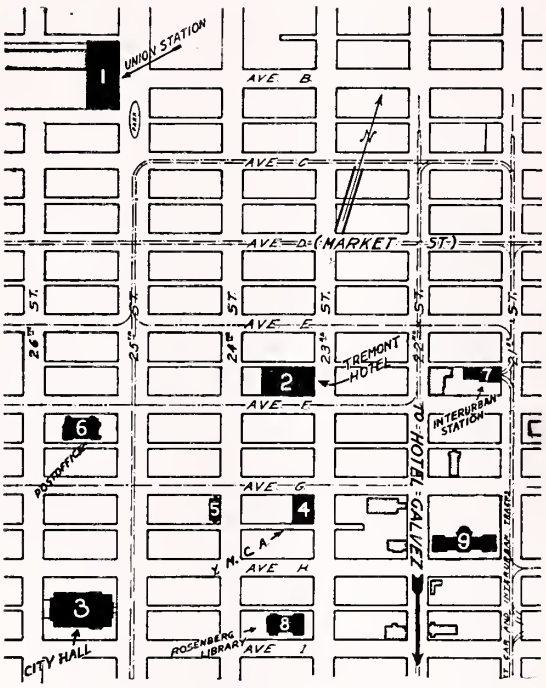
The United States and Texas Quarantine Stations are situated in Galveston Bay, opposite the city. They are built to handle the mass of business trans-

acted by the quarantine department at this port. They are passed by pleasure launches.

The Immigration Station is situated on Pelican Island, opposite the city. The continued growth of

TRAMP STEAMERS.

immigration made necessary the construction of this building, wherein all business pertaining to receipt of immigrants is transacted. The number of immi-



WHERE WE MEET.

1. Union Station.
2. Tremont Hotel; Hotel Headquarters; Registration; Information; Scientific and Commercial Exhibits; Hall No. 2, House of Delegates.
3. City Hall: Hall No. 1, Public Health Meeting, all General Meetings, Section on Medicine and Diseases of Children, Section on Surgery; Hall No. 3, Section on Life Insurance, Section on Ophthalmology, Otology, Rhinology and Laryngology; Hall No. 4, Section on Pathology, Section on Gynecology and Obstetrics.
4. Y. M. C. A. Building: Hall No. 5, Section on State Medicine and Public Hygiene; State Association of County Secretaries.
5. Lutheran Church.
6. Post Office.
7. Interurban Station.
8. Rosenberg Library.
9. Ball High School.

grants reaching Galveston monthly passes the thousand mark. The station is passed by pleasure launches.

Texas City lies opposite Galveston on Galveston Bay, one hour's ride by ferry from pier 23. A very interesting place because of its modern shipping facilities, oil refinery and mammoth grain elevators. It is also reached by Interurban.

Port Bolivar lies opposite Galveston on Galveston Bay. It is the point of arrival and departure of the Gulf and Interstate Railroad ferry to Galveston. Fort Travis Military Reservation is located northeast of the town. The lighthouse is a point of

MOSQUITO FLEET.

interest. It is reached by launch and ferry.

Pleasure Launches—Galveston is fortunate in the number and quality of her pleasure launches, which ply to all points of interest in the harbor and bay. The launches dock at pier 22, and are available at all times for visitors. Popular and uniform prices prevail for trips of one hour or more. The launches visit the Causeway, Texas City, Port Bolivar, Quarantine Station, Immigration Station and the Jetties.

TEXAS ROENTGEN RAY SOCIETY MEETING.

The Texas Roentgen Ray Society will hold its next meeting in Galveston, May 8th, from 1 to 11 p. m., at the Hotel Galvez.

We had a splendid program at our last meeting and expect a better one this time. All physicians interested in this line of work are cordially invited to attend.

Remember the date, Monday, a day in advance of the State Association meeting.

J. M. MARTIN, President.
J. W. TORBETT, Secretary.

SCIENTIFIC EXHIBITS.

THE EDITOR: We are very anxious to obtain specimens which would be of interest to members of the Association. It makes no difference whether the specimens are of gross pathology, removed at operation or autopsy, microscopical slides demonstrating interesting pathological lesions, interesting *x*-ray plates. Charts or drawings, illustrating any interesting features of diseases, operations, etc., will also be acceptable. The idea in this exhibit is to get interesting and instructive specimens from all parts of the State possible. We hope to have exhibits which will interest both the general practitioner and the specialist, in whatever branch of medicine he may be specializing.

Members of the association are earnestly requested to forward any such exhibits to the chairman of the committee, at Galveston, who will guarantee to return them intact to the exhibitor at the end of the meeting. Unless otherwise desired, the names of contributors will be attached to the exhibit, together with any descriptions which he may

wish to have attached. A sufficient number of demonstrators will be on hand during the exhibition to explain and care for the exhibits. Plenty of microscopes are available.

We feel that if members of the Association over the State will co-operate in this effort, a scientific exhibit of real value will result and a valuable feature to the annual sessions will be added.

Co-operation will be of two kinds; sending interesting exhibits, and taking an interest in the exhibits. They will be given a prominent place near the registration bureau, so there will be no difficulty in finding them.

H. L. McNeil, Chairman,
Committee on Scientific Exhibits.

Galveston, March 15, 1916.

NOTICE TO ESSAYISTS: FROM THE PUBLICITY COMMITTEE.

All essayists on the program of the scientific sections for the Galveston session of the State Medical Association, May 9, 10, 11, are hereby requested to furnish the undersigned brief synopses of their essays, to the end that they may be edited and made ready for the lay press, as the judgment of the committee may dictate.

A. W. Carnes,
Chairman Publicity Committee.

Hutchins, Texas, March 25, 1916.

UNIVERSITY OF LOUISVILLE ALUMNI TO BANQUET.

Dear Doctor: The Alumni Association of the University of Louisville will hold a banquet in Galveston on the night of Tuesday, May 9. This Association embraces the graduates of all component colleges of the present University, namely, University of Louisville, Kentucky School of Medicine, Hospital College of Medicine, Louisville Medical College and Kentucky University.

Tickets will be $1.50 each and will cover all expenses. In order to avoid the confusion and delay incident to registering on the busy opening day, it is advisable for each one expecting to attend to send check for tickets to Dr. C. M. Rosser, Dallas, Dr. Ben Turner, Cleburne, or Dr. Crittenden Joyes, Fort Worth. Tickets will then be mailed at once.

Fraternally,
Crittenden Joyes,
President.

Fort Worth, March 20, 1916.

ANNUAL MEETING OF COUNTY AND CITY HEALTH OFFICERS.

Dear Doctor: I desire to call the attention of county and city health officers to Section 30, Article 4552, Civil Statutes, 1911, which provides that I shall call an annual meeting of the County and City Health Officers of the State of Texas once each year. I am calling this meeting for Galveston, May 12, 1916. The hall in which the meetings will be held will be announced in the daily press later.

The School for County and City Health Officers, conducted by the University of Texas and the State Board of Health, will begin on this date. We have a splendid program for this school, which will last two weeks. Surgical and medical clinics will be held each morning at the city hospitals during the term. I respectfully request and urge that all county and city health officers attend this meeting and come prepared to stay during the whole term of the school. They should see their county and city officials in regard to expense accounts.

I desire also to call attention to the Section on State Medicine and Hygiene of the State Medical Association, which will be held in the Y. M. C. A. Building, Hall No. 5, on May 10th.

Very respectfully yours,
W. B. Collins,
State Health Officer.

Austin, April 1, 1916.

GENERAL ARRANGEMENTS FOR ALUMNI BANQUETS.

Dear Doctor: Please announce that any alumni association fraternity or group of physicians otherwise, who expect to attend the annual session and who may desire information concerning the caterers of Galveston, and the cost of any service of this character, or who may desire preliminary arrangements made, will have their wants attended to promptly, if they will outline them to me, in a letter or otherwise. Preliminary arrangements have been made with the Hotel Galvez to care for most of these entertainments, and at rates to suit the individual organization. Arrangements can be made elsewhere if desired.

Fraternally yours,
H. O. Sappington,
Chairman Alumni Banquet Committee.

Galveston, Texas, March 11, 1916.

ANNOUNCEMENT AND PROGRAM

OF THE

Fiftieth Annual Session

OF THE

State Medical Association of Texas

Galveston, May 9, 10 and 11, 1916

OFFICERS

Dr. G. H. Moody, President.....San Antonio
Dr. J. M. Inge, President-Elect.....Denton
Dr. M. F. Bledsoe, Vice-President.....Port Arthur
Dr. H. C. Black, Vice-President.....Waco
Dr. T. D. Frizzell, Vice-President.....Quanah
Dr. Holman Taylor, Secretary.....Fort Worth
Dr. W. L. Allison, Treasurer.....Fort Worth

PRESIDENTS OF AFFILIATED DISTRICT SOCIETIES

First and Second Districts—Dr. J. M. Britton, Cisco.

Third District.—Dr. S. P. Vinyard, Amarillo.

Fourth District.—Dr. J. S. Anderson, Brady.

Fifth and Sixth Districts—Dr. E. H. Sauvignet, Laredo.

Seventh District.—Dr. Z. T. Scott, Austin.

Eighth, Ninth and Tenth Districts.—Dr. E. A. Malsch, Victoria.

Eleventh District.—Dr. G. G. Bell, Tyler.

Twelfth District.—Dr. E. B. Baker, Gatesville.

Thirteenth District.—Dr. J. H. Eastland, Mineral Wells.

Fourteenth District.—Dr. C. R. Johnson, Gainesville.

Fifteenth District.—Dr. R. Y. Lacy, Pittsburg.

BOARD OF TRUSTEES

Dr. W. R. Thompson, Sec'y (four years)..Fort Worth
Dr. R. R. White (three years).....Temple
Dr. J. S. Turner (two years).....Dallas
Dr. W. E. Sturgis (one year).....San Antonio
Dr. John T. Moore, Chm. (term expires).....Houston

COUNCIL ON MEDICAL DEFENSE

Dr. W. D. Jones, Chm. (one year).....Dallas
Dr. Holman Taylor, Sec'y (ex-officio)....Fort Worth
Dr. E. F. Cooke (two years).....Houston
Dr. W. A. King (term expires).....San Antonio

COUNCILORS

First District.
Dr. F. P. Miller (two years).....El Paso

Second District.
Dr. N. J. Phenix (one year).....Colorado

Third District.
Dr. C. R. Hartsook (term expires)....Wichita Falls

Fourth District.
Dr. S. C. Parsons (two years).....San Angelo

Fifth District.
Dr. W. A. King, Chm. (term expires)....San Antonio

Sixth District.
Dr. W. N. Wardlaw (term expires)....Corpus Christi

Seventh District.
Dr. T. J. Bennett (one year).....Austin

Eighth District.
Dr. Walter Shropshire (one year).....Yoakum

Ninth District.
Dr. Wallace Ralston (one year).....Houston

Tenth District.
Dr. A. R. Sholars (one year).....Orange

Eleventh District.
Dr. C. C. Nash (two years).....Palestine

Twelfth District.
Dr. A. C. Scott, Sec'y (term expires).....Temple

Thirteenth District.
Dr. C. B. Williams (two years).....Mineral Wells

Fourteenth District.
Dr. A. W. Carnes (two years).....Hutchins

Fifteenth District.
Dr. W. H. Blythe (term expires).....Mt. Pleasant

DELEGATES TO A. M. A.

Regular.
Dr. A. B. Small (one year).....Dallas
Dr. C. E. Cantrell (term expires).....Greenville
Dr. Holman Taylor (one year).....Fort Worth
Dr. M. L. Graves (term expires).....Galveston
Dr. M. M. Carrick (one year).....Dallas

Alternate.
Dr. Frank Paschal (one year).....San Antonio
Dr. W. B. Russ (term expires).....San Antonio
Dr. E. H. Cary (one year).....Dallas
Dr. Albert Woldert (term expires).....Tyler
Dr. J. H. Foster (one year).....Houston

COUNCIL ON LEGISLATION AND PUBLIC INSTRUCTION

Dr. G. H. Moody, Chm. (ex-officio).....San Antonio
Dr. Holman Taylor, Sec'y (ex-officio)....Fort Worth
Dr. M. P. McElhannon (two years).....Belton
Dr. Bacon Saunders (one year).....Fort Worth
Dr. Ben H. Turner (term expires).....Cleburne

COMMITTEES

Committee on Optometry Legislation.
Dr. J. H. Foster, Chairman, Houston.
Dr. R. E. Nicholson, Brenham.
Dr. R. W. Dunlap, Palestine.
Dr. E. H. Vaughn, Tyler.
Dr. T. J. Walthall, San Antonio.

Committee on Defectives and Dependents.
Dr. T. O. Maxwell, Chairman, Austin.
Dr. B. T. Young, San Antonio.
Dr. John W. Preston, Austin.
Dr. T. B. Bass, Abilene.
Dr. G. F. Powell, Terrell.

Committee on Sale of Poisonous Drugs.
Dr. G. H. Moody (ex-officio), San Antonio.
Dr. Holman Taylor (ex-officio), Fort Worth.
Dr. W. S. Carter, Galveston.
Dr. J. H. Graves, Waco.
Dr. W. N. Brooks, Groesbeck.

Committee on Scientific Work.
Dr. K. H. Beall, Chairman, Fort Worth.
Dr. O. L. Norsworthy, Houston.
Dr. G. P. Pipkin, Lancaster.
Dr. H. F. Connally, Waco.
Dr. J. A. R. Moseley, Jefferson.

Committee on Study of Cancer.
Dr. W. L. Brown, Chairman, El Paso.
Dr. L. P. McCuistion, Paris.
Dr. Wm. Lee Secor, Kerrville.

Committee on Study of Pellagra.
Dr. B. A. Fowler, Chairman, Brownwood.
Dr. W. T. Wilson, Navasota.
Dr. E. J. Neathery, Sherman.

Committee on Study of Venereal Diseases.
Dr. H. C. Moore, Chairman, Houston.
Dr. F. C. Walsh, San Antonio.
Dr. A. I. Folsom, Dallas.

Committee on Study of Cottonseed Meal as a Food for Humans.
Dr. L. B. Bibb, Chairman, Austin.
Dr. Horace Gilbert, Austin.
Dr. L. L. Edwards, San Marcos.

Committee on Revision of School Text-Books.
Dr. T. J. Bennett, Chairman, Austin.
Dr. Homer T. Wilson, San Antonio.
Dr. W. L. Davidson, Wharton.

Committee on Medical Education.
Dr. A. B. Kennedy, Chairman, Bonham.
Dr. Wm. Stokes, Jacksonville.
Dr. Q. B. Lee, Wichita Falls.
Dr. J. W. Ellis, Lampasas.
Dr. J. E. Rogers, Rock Springs.

Committee on First Aid.
Dr. R. W. Knox, Chairman, Houston.
Dr. Bacon Saunders, Fort Worth.
Dr. R. L. Ramey, El Paso.

Committee on Insurance.

Dr. B. M. Worsham, Chairman, El Paso.
Dr. W. A. Boyce, Dallas.
Dr. A. J. Gilbert, Hillsboro.
Dr. W. E. Lowry, Laredo.
Dr. J. S. Anderson, Brady.

Committee on Care of Indigent Physicians.

Dr. A. C. DeLong; Chairman, San Angelo.
Dr. J. T. Moore, Houston.
Dr. C. C. Gidney, Plainview.

Committee on Collection and Preservation of Records.

Dr. Frank Paschal, Chairman, San Antonio.
Dr. J. D. Osborn, Cleburne.
Dr. H. W. Cummins, Hearne.

Committee on Arrangements for the Annual Session.

Dr. Marvin L. Graves, Chairman, Galveston.
Dr. Ed. Randall, Galveston.
Dr. A. W. Fly, Galveston.
Dr. W. F. Starley, Galveston.
Dr. H. P. Cook, Galveston.

Committee on Memorial Exercises.

Dr. Geo. H. Lee, Chairman, Galveston.
Dr R. B. Jackson, Mexia.
Dr. C. W. Goddard, Holland.

Committee on Scientific Exhibits.

Dr. H. L. McNeil, Chairman, Galveston.
Dr. W. H. Moursund, Dallas.
Dr. C. P. Brewer, Fort Worth.
Dr. G. W. Stone, Waxahachie.
Dr. S. Webb, Jr., Dallas.
Dr. R. T. Goodwin, Sinton.
Dr. L. H. Denman, Lufkin.

Committee on Transportation.

Dr. Holman Taylor, Chairman, Fort Worth.
Dr. Wm. Gammon, Galveston.
Dr. F. R. Ross, Houston.

Committee on Publicity.

Dr. A. W. Carnes, Chairman, Hutchins.
Dr. A. R. Sholars, Orange.
Dr. W. N. Wardlaw, Corpus Christi.

SPECIAL DELEGATES.

Texas Member of the National Legislative Council.

Dr. M. M. Carrick, Dallas.

Texas Representative of the National Council on Medical Education.

Dr. John S. Turner, Dallas.

Texas Delegate to the American Association of Medical College.

Dr. C. E. Cantrell, Greenville.

To Texas Pharmaceutical Association.

Dr. S. A. Woodward, Fort Worth.

To Texas State Dental Association.

Dr. W. F. Starley, Galveston.

To Arkansas State Medical Society.

Dr. W. G. Jamieson, Palestine.

To Colorado State Medical Society.

Dr. E. A. Johnston, Amarillo.

To Louisiana State Medical Society.

Dr. W. J. Pollard, Kaufman.

To New Mexico State Medical Society.

Dr. F. P. Miller, El Paso.

To Oklahoma State Medical Society.

Dr. J. H. Florence, Houston.

LOCAL COMMITTEES

Committee on Arrangements.—Dr. M. L. Graves, Chairman; Drs. Geo. H. Lee, A. W. Fly, W. F. Starley, Edward Randall.

Entertainment Committee.—Dr. Geo. H. Lee, Chairman; Drs. W. C. Fisher, Sr., A. O. Singleton, S. M. Morris, Fred W. Aves.

General Reception Committee.—Dr. James E. Thompson, Chairman; members of Galveston County Medical Society.

Ladies' Reception Committee.—Mrs. Edward Randall, Chairman; wives and members of Galveston County Medical Society.

Ladies' Entertainment Committee.—Mrs. M. L. Graves, Chairman; Mesdames Geo. H. Lee, W. S. Carter, Wm. Gammon, H. C. Haden, W. F. Starley, J. C. Ralston, A. G. Heard, Jas. E. Thompson.

Alumni Banquet Committee.—Dr. H. O. Sappington, Chairman; Drs. W. R. Cooke, W. C. Fisher, Jr., W. J. Jinkins, J. A. Flautt.

Hall and Exhibit Committee.—Dr. A. G. Heard, Chairman; Drs. Wm. Gammon, B. L. Arms, Wm. Keiller, H. L. McNeil, Henry C. Hartman, H. O. Sappington.

Transportation Committee.—Dr. T. L. Kennedy, Chairman; Drs. W. C. Fisher, Jr., G. E. Delaney, J. G. Flynn, E. S. Cox.

Hotel Committee.—Dr. J. C. Ralston, Chairman; Drs. W. J. Jinkins, Dick P. Wall, Ben F. Smith, Jr., C. T. Stone, G. S. Sykes, J. P. Tucker.

Public Health Lecture Committee.—Dr. W. S. Carter, Chairman; Drs. L. P. H. Bahrenburg, Walter Kleberg, B. L. Arms, J. S. Davidson, Ethel Lyon Heard.

Finance Committee.—Dr. Wm. Gammon, Chairman; Drs. Edward Randall, W. P. Breath, Henry C. Haden, J. G. Flynn.

Announcements

BUSINESS

Members on arriving in Galveston should first visit the registration office in the lobby of the Tremont Hotel, where they may register and receive badges and programs. The information bureau will be just across the hall from the registration office, where all necessary information may be had immediately following registration. The Tremont Hotel is in walking distance of the depot, as may be readily seen by reference to the plat appearing elsewhere in the program. Street car transportation to the hotels on the beach are available, and proper direction may be had from depot officials, or any street car conductor will direct visitors to the proper service. Carriages and taxicabs will be also available, and their rates are reasonable.

Members of the reception committee, the hotel committee and the entertainment committee, will be found at the information bureau. Members should not fail to leave their names and local addresses here, for the convenience of inquiring friends and others. All mail and telegrams will be directed to the information bureau, and will be properly distributed, if addresses are available. Members expecting communications of this character should make inquiries from time to time, and leave information as to their prospective whereabouts during the day.

All mail, telegrams and telephone messages, should be addressed in care of the State Medical Association of Texas, Tremont Hotel, Galveston, Texas.

Official announcements will be posted in the lobby of the Tremont Hotel, and important changes in the order of business or entertainments, will also be announced before scientific sections and the general meetings.

Those desiring reservation of exhibition space should apply to Dr. A. G. Heard, Chairman, Hall and Exhibit Committee, Galveston, Texas. Blue prints of available space for this purpose, together with price of each space, are available and will be furnished on application. No exhibit will be acceptable, which does not comply in every particular with the advertising standards of the TEXAS STATE JOURNAL OF MEDICINE, which are identical with those of *The Journal of the American Medical Association.*

SOCIAL

TUESDAY.

Visiting ladies will be entertained at a musical tea, at the Hotel Galvez, from 4:00 to 5:30 p. m.

At 9 p. m., following the memorial exercises, visiting ladies will assemble in the Ball Room of the Hotel Galvez, for an informal evening with the wives of Galveston physicians.

The usual banquets, reunions and social gatherings of fraternities, alumni association, etc., will take place in the evening, immediately following the memorial exercises. These banquets will, for the most part, be held in the Hotel Galvez. The various organizations concerned will have representatives at or near the bureau of information, in the lobby of the Tremont Hotel, during the day, for the purpose of disseminating information and making all necessary arrangements. None of these functions will begin until after the adjournment of the memorial exercises. Dr. H. O. Sappington, Galveston, is Chairman of the Alumni Banquet Committee, to whom all interested are directed.

WEDNESDAY.

11 a. m.—Visiting ladies will assemble near the South entrance to the Tremont Hotel, for participation in an auto ride and sea food luncheon down the Island.

1 p. m.—At this hour a luncheon, complimentary to the President-Elect, will be given, at the Hotel Galvez. This function will terminate in time for members to return to their respective section meetings.

A boat ride on the Bay will be tendered visiting members and ladies, by Messers Suderman and Dolson, to begin immediately following adjournment of the general session in the afternoon. The exact place and hour of departure will be announced later.

The President's reception, with buffet luncheon, will be held at the Ball Room of the Hotel Galvez, beginning at 9 p. m.

THURSDAY.

1 p. m.—Ex-President's luncheon, Hotel Galvez.

3 to 5 p. m.—*Tea dansant*, for visiting ladies, Hotel Galvez.

PUBLIC HEALTH MEETING

A public health meeting will be held in the main auditorium of the City Hall (Hall No. 1), Monday night preceding the formal opening of the annual session. Dr. K. H. Beall of Fort Worth, will deliver an address on the subject, *Pellagra*, and Dr. L. P. H. Bahrenburg, Surgeon, United States Public Health Service, of Galveston, will speak on the subject, "*What Is the Use?* This meeting is held for the benefit of the general public, and for the edification of those members who may be able to arrange for the additional day in the city.

RATES

The railroads have granted a rate of one and one-third fare for the round trip, with date of sale, May 7th, 8th and 9th, good for trains arriving in Galveston on the morning of May 10th, with final limit June 1st. This extension of time is incidental to the proposed Health Officer School, to be conducted by the University of Texas, in conjunction with the State Board of Health, and beginning immediately following adjournment of the annual session of the State Medical Association.

HOTELS

Rates apply to rooms without baths. From fifty cents to one dollar extra will be charged for rooms with baths.

Atlanta.—420-424 Twentieth St., 50c per day.

Bashor.—1812 Twenty-third St., $1.00 per day (American plan).

Beach.—2202 Ave. Q, $1.00 and up.

Beacon.—2220 Ave. Q, $1.00 and up.

Galvez.—Twenty-first and Boulevard, $2.00 to $5.00 per day.

Highland Inn.—2116 Twenty-fifth St., $1.00, $1.50 and $2.00.

Loves Beach.—2218 Ave. Q, 75c single, $1.00 double.

New City.—2427 Ave. E, $1.00 per day.

Oxford.—2116 Ave. F., $1.00 double, 75c single.

Oriental.—Twenty-first and Ave. F, $1.00 single, $1.50 double.

Palmetto.—303 Twenty-third St., $1.00 per day.

Panama.—206 Twenty-fifth St., $1.00 single, $1.50 double.

Plaza.—2009 Twenty-first St., $1.00 per day.

Ridgeway.—2001 Twenty-third St., $1.00 per day.

Royal.—225 Twenty-third St., $1.00, $1.50 and $2.00 single, $2.00, $2.50 and $3.00 double.

Savoy.—2016 Ave. D, $1.00 single, $1.50 double.

St. Nicholas.—320 Twentieth St., $1.25 per day.

Terminal.—201 Twenty-fifth St., $1.00 single, $1.50 double.

Tremont.—521 Twenty-third St., $1.00 to $1.50 single, $2.50 to $4.00 double.

Washington.—2220 Ave. C, $1.00 single, $2.00 double.

HOUSE OF DELEGATES

First Meeting Tuesday, May 9, 2 p. m., Hall No. 2, Tremont Hotel, Ball Room

1. Call to order.
2. Roll call and announcement of result.
3. Reading of minutes of previous meeting.
4. Appointment of Reference Committees.
5. Report of Secretary.
6. Report of Treasurer.
7. Report of Trustees.
8. Report of Council on Medical Defense.
9. Report of Board of Councilors.
10. Report of Standing Committees.
    - Committee on Arrangements on for the Annual Session.
    - Council on Legislation and Public Instruction.
    - Committee on Optometry Legislation.
    - Committee on Defectives and Dependents.
    - Committee on Sale of Poisonous Drugs.

Committee on Insurance.
Committee on Collection and Preservation of Records.
Committee on Transportation.
Committee on Memorial Exercises.
Committee on Medical Education.
Committee on Care of Indigent Physicians.
Committee on Publicity.
Committee on Scientific Work.
Committee on Study of Cancer.
Committee on Study of Pellagra.
Committee on Study of Venereal Diseases.
Committee on Scientific Exhibits.
Committee on Study of Cottonseed Meal.
Committee on Revision of School Text-Books.
Committee on First Aid.
Texas Representative of the National Council on Medical Education.
Texas Member of the National Legislative Council.
Texas Delegate to the American Association of Medical Colleges.
Fraternal Delegates.

11. Report of Special Committees of the House.
12. Reading of Communications.
13. Reading of Memorials and Resolutions.
14. Unfinished Business.
15. New Business.
16. Election of Officers (morning of last day)—President-Elect, three Vice-Presidents, Secretary, Treasurer, Member Council on Medical Defense, one Trustee, five Councilors, two Delegates and two Alternate Delegates to the A. M. A.
17. Selection of Time and Place of the Next Annual Session.
18. Appointment Committees.
19. Appointment of Section Officers.
20. Adjournment.

First Day, Tuesday, May 9th

GENERAL MEETING AND OPENING EXERCISES

10:30 a. m., Hall No. 1, City Hall Auditorium

Prayer.....Rev. C. S. Aves

Welcome Address, on Behalf of Galveston County Medical Society,
Dr. Geo. H. Lee, President, Galveston.

Welcome Address on Behalf of the South Texas District Medical Association,
Dr. E. A. Malsch, Victoria, President.

Welcome Address on Behalf of the City,
Hon. Lewis Fisher, Mayor.

Response and President's Annual Address,
Dr. G. H. Moody, San Antonio.

Announcements.

Benediction.....Rev. Edward Stubblefield

SECTION ON OPHTHALMOLOGY, OTOLOGY, RHINOLOGY AND LARYNGOLOGY

2 to 6 p. m., Hall No. 3, City Hall, Council Chamber

Dr. M. E. Taber, Chairman.....Dallas
Dr. R. B. Sellers, Secretary.....Fort Worth

1. *Chairman's Address: Surgical Treatment of Diseases of the Accessory Sinuses.*
2. *The Diagnosis of Disease of the Accessory Sinuses.*
   Dr. J. H. Foster.....Houston
   Discussion opened by Dr. W. R. Thompson, Fort Worth.
3. *Complications in Diseases of the Accessory Sinuses.*
   Dr. W. P. Breath.....Galveston
   Discussion opened by Dr. S. M. Morris, Galveston.
4. *Does the Sphenoidal Sinus Pulsate?*
   Dr. H. B. Decherd.....Dallas
   Discussion opened by Dr. S. N. Key, Austin.
5. *The Blood Clot Method of Treating Mastoiditis.*
   Dr. W. R. Thompson.....Fort Worth
   Discussion opened by Dr. R. H. T. Mann, Texarkana.
6. *The Conjunctival Flap in the Treatment of Gonorrheal Ophthalmia, With Report of Cases.*
   Dr. R. H. T. Mann.....Texarkana
   Discussion opened by Dr. E. A. Robin, New Orleans.
7. *Traumatic Cataract Followed by Glaucoma; Operation and Result.*
   Dr. Edgar H. Vaughn.....Tyler
   Discussion opened by Dr. Harry Hayden, Galveston.
8. *Cataract Extraction, with Report of Cases.*
   Dr. H. T. Aynesworth.....Waco
   Discussion opened by Dr. Wallace Ralston, Houston.
9. *My Experience With the Tuck Operation for Strabismus.*
   Dr. E. A. Robin.....New Orleans
   Discussion opened by Dr. John O. McReynolds, Dallas.
10. *The Handling of Eye Cases in Railroad Practice.*
    Dr. J. L. Scales.....Shreveport
    Discussion opened by Dr. J. H. Burleson, San Antonio.

(Section Adjourned to Wednesday Morning.)

MEMORIAL EXERCISES

8 to 9 p. m., Hall No. 1, City Hall, Auditorium

Opening Prayer.....Rev. Dr. O. E. Goddard

One Sweetly Solemn Thought.....Ambrose
Mrs. Holman, Mrs. Reid, Mr. Meyer and Mr. Pountney.

**Announcement Members Deceased During the Year.*
Dr. Geo. H. Lee, Chairman.

Abide With Me.....Liddle
Mrs. Geo. F. Reid.

Address.....Very Rev. J. M. Kirwin

Lead Kindly Light.....Buck
Mrs. Holman and Mrs. Reid.

Benediction.....Rabbi Henri Cohen

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*List includes only those who were members at the time of demise, and who were officially reported to the State Secretary.

SECTION ON MEDICINE AND DISEASES OF CHILDREN

2 to 6 p. m., Hall No. 1, City Hall, Auditorium

DR. S. P. RICE, Chairman.....Marlin
DR. E. V. DEPEW. Secretary.....San Antonio

1. *Chairman's Address.*
2. *Some Further Observations in Typhoid Fever.*
   Dr. M. L. Graves.....Galveston
   Discussion opened by Dr. C. M. Grigsby, Dallas.
3. *Isolation of Bacillus Typhosus from the Bile in Typhoid Fever.*
   Dr. Boyd Reading.....Galveston
   Discussion opened by Dr. Chas. T. Stone, Galveston.
4. *What Has Become of My High Blood Pressure Cases: Analysis of 125 Cases.*
   Dr. R. W. Baird.....Dallas
   Discussion opened by Dr. J. S. Lankford, San Antonio.
5. *Food in Health and Disease, Some Recent Advances in our Knowledge.*
   Dr. Carl Lovelace.....Waco
   Discussion opened by Dr. C. U. Patterson, Houston.
6. *The Feeding Problem in Infancy.*
   Dr. F. G. Gengenbach.....Denver, Colo.
   Discussion opened by Dr. Walter M. Peck, Dallas.
7. *Neuroses of Childhood.*
   Dr. Mary C. Harper.....San Antonio
   Discussion opened by Dr. N. N. Allen, Houston.
8. *Does Administration of Pituitrin to the Mother Produce Diffuse Nervous Lesions in the Infant.*
   Dr. A. G. Heard.....Galveston
   Discussion opened by Dr. N. A. Poth, Seguin.
9. *The Differential Diagnosis and Treatment of Convulsions in Infancy.*
   Dr. Clifford G. Grulee.....Chicago
   Discussion opened by Dr. S. J. Francis, Luling.
10. *Pyelitis in Children.*
    Dr. Calvin R. Hannah.....Dallas
    Discussion opened by Dr. J. G. Harrison, McAllen.
11. *The Male Climacteric.*
    Dr. J. S. Turner.....Dallas
    Discussion opened by Dr. Jas. Greenwood, Jr., Houston.

(Section Adjourned to Wednesday Morning.)

MEMORIAL EXERCISES

8 to 9 p. m., Hall No. 1, City Hall, Auditorium

Opening Prayer.....Rev. Dr. O. E. Goddard
One Sweetly Solemn Thought.....Ambrose
Mrs. Holman, Mrs. Reid, Mr. Meyer and Mr. Pountney.
**Announcement Members Deceased During the Year.*
Dr. Geo. H. Lee, Chairman.
Abide With Me.....Liddle
Mrs. Geo. F. Reid.
Address.....Very Rev. J. M. Kirwin
Lead Kindly Light.....Buck
Mrs. Holman and Mrs. Reid.
Benediction.....Rabbi Henri Cohen

*List includes only those who were members at the time of demise, and who were officially reported to the State Secretary.

SECTION ON PATHOLOGY

2 to 6 p. m., Hall No. 4, City Hall, Fourth Floor

DR. BRUCE ALLISON, Chairman.....Fort Worth
DR. P. I. NIXON, Secretary.....San Antonio

1. *Chairman's Address.*
2. *Some Observations on the Microscopic Study of Uterine Tissues.*
   Dr. Henry C. Hartman.....Galveston
   Discussion opened by Dr. V. H. Keiller, Galveston.
3. *Diagnosis of Pernicious Anemia.*
   Dr. G. C. Kindley.....Dallas
   Discussion opened by Dr. Henry Hartman, Galveston.
4. *Laboratory Efficiency in Diagnosis and Treatment.*
   Dr. J. E. Robinson.....Temple
   Discussion opened by Drs. H. L. Wilder, Glen Rose, and J. J. Terrill, Temple.
5. *Lange's Colloidal Gold Test.*
   Dr. J. H. Black.....Dallas
   Discussion opened by Dr. E. F. Cooke, Houston.
6. *Homologous Amboceptors in Infection and Immunity.*
   Dr. M. W. Wooten.....San Antonio
   Discussion opened by Drs. B. F. Stout and I. S. Kahn, San Antonio.
7. *The Use and Abuse of Vaccines.*
   Dr. I. S. Kahn.....San Antonio
   Discussion opened by Dr. M. W. Wooten, San Antonio.
8. *The Practical Value of the Wassermann Test. With Analysis of Over 500 Tests.*
   Dr. W. H. Moursund.....Dallas
9. *Some Interesting Pathological Specimens.*
   Dr. Martha A. Wood.....Houston
   Discussion opened by Dr. Henry Hartman, Galveston.

(Section Adjourned.)

MEMORIAL EXERCISES

8 to 9 p. m., Hall No. 1, City Hall, Auditorium

Opening Prayer.....Rev. Dr. O. E. Goddard
One Sweetly Solemn Thought.....Ambrose
Mrs. Holman, Mrs. Reid, Mr. Meyer and Mr. Pountney.
**Announcement Members Deceased During the Year.*
Dr. Geo. H. Lee, Chairman.
Abide With Me.....Liddle
Mrs. Geo. F. Reid.
Address.....Very Rev. J. M. Kirwin
Lead Kindly Light.....Buck
Mrs. Holman and Mrs. Reid.
Benediction.....Rabbi Henri Cohen

*List includes only those who were members at the time of demise, and who were officially reported to the State Secretary.

Second Day, Wednesday, May 10th

SECTION ON OPHTHALMOLOGY, OTOLOGY, RHINOLOGY AND LARYNGOLOGY —Continued

9 a. m. to 4 p. m., Hall No. 4, City Hall, Council Chamber

11. *The Relief of Dysphagia in Laryngeal Tuberculosis by Means of Alcoholic Injection of the Superior Laryngeal Nerve.*
    Dr. Sidney Israel.....Houston
    Discussion opened by Dr. D. L. Bettison, Dallas.
12. *Detachment of the Retina.*
    Dr. John O. McReynolds.....Dallas
    Discussion opened by Dr. J. L. Scales, Shreveport.
13. *The Tonsil as a Cause of Focal Infection.*
    Dr. F. D. Boyd.....Fort Worth
    Discussion opened by Dr. J. H. Foster, Houston.

14. *Hemorrhage Following Operation Upon the Tonsil.*
Dr. Wm. E. Howard.....Dallas
Discussion opened by Dr. W. B. Anderson, Brownwood.

15. *Why Tonsillectomy?*
Dr. T. K. Proctor.....Sulphur Springs
Discussion opened by Dr. Crittenden Joyes, Fort Worth.

16. *Enucleation of the Eye, With Fat Implantation.*
Dr. J. W. Head.....Fort Worth
Discussion opened by Dr. E. H. Cary, Dallas.

17. *Glass Sphere Implantation in the Orbit.*
Dr. Wallace Ralston.....Houston
Discussion opened by Dr. J. L. Burgess, Waco.

18. *Skiascopy as a Factor in the Correction of Strabismus.*
Dr. R. W. Moore.....Fort Worth
Discussion opened by Dr J. M. Woodson, Temple.

19. *The Status of Ophthalmology in America: Past Achievements and Present Need of Reform.*
Dr. L. H. Lanier.....Texarkana
Discussion opened by Dr. H. T. Aynesworth, Waco.

20. *The Effect of Syphilis in Producing Blindness and Impairment of Vision.*
Dr. Robert E. Moss.....San Antonio
Discussion opened by Dr. Sidney Israel, Houston.

21. *Sympathetic Ophthalmia, With Report of Case.*
Dr. J. H. Burleson.....San Antonio
Discussion opened by Dr. W. P. Breath, Galveston.

22. *Symptoms and Treatment of Deflected Nasal Septum.*
Dr. H. L. Warwick.....Fort Worth
Discussion opened by Dr. J. H. Foster, Houston.

23. *Borderland Surgery.*
Dr. Turner F. Roberts.....Paris
Discussion opened by Dr. A. J. Caldwell, San Antonio.

24. *Further Report on Foreign Bodies in the Trachae, Bronchi and Aesophagus.*
Dr. John L. Burgess.....Waco

25. *Subconjunctival and Temporal Medication in Certain Eye Conditions.*
Dr. R. B. Sellers.....Fort Worth
Discussion opened by Dr. Robt. E. Moss, San Antonio.

26. *Defects in Sight and Hearing that Retard Mental Development.*
Dr. E. H. Cary.....Dallas
(Section Adjourned.)

GENERAL MEETING AND JOINT SESSION OF ALL SCIENTIFIC SECTIONS

4 to 6 p. m., Hall No. 1, City Hall, Auditorium

1. *Report of Committee on Study of Cancer.*
Dr. W. L. Brown, Chairman.....El Paso

2. *Report of Committee on Study of Pellagra.*
Dr. B. A. Fowler, Chairman.....Brownwood

3. *Report of Committee on Study of Venercal Diseases.*
Dr. H. C. Moore, Chairman.....Houston

4. *Report of Committee on the Study of Cottonseed Meal as a Food for Humans.*
Dr. L. B. Bibb, Chairman.....Austin

5. *Report of Committee on Scientific Work.*
Dr. K. H. Beall, Chairman.....Fort Worth

SECTION ON MEDICINE AND DISEASES OF CHILDREN—Continued

9 a. m. to 4 p. m., Hall No. 1, City Hall, Auditorium

12. *Medical Preparedness.*
Dr. G. H. Hampshire.....Kosse
Discussion opened by Dr. Oscar S. McMullen, Victoria.

13. *Vaccine in Respiratory Diseases.*
Dr. B. F. Stout.....San Antonio
Discussion opened by Dr. Jas. E. Robinson, Temple.

14. *The Present Status of Vaccine Therapy.*
Dr. C. E. Collins.....Waco
Discussion opened by Dr. Nettie Klein, Texarkana.

15. *The Treatment of Asthma and the Mixed Infeetions of Pulmonary Tuberculosis With Autogenous Vaccines.*
Dr. Truman C. Terrell.....Fort Worth
Discussion opened by Drs. M. L. Talbot, Fort Worth, and J. J. Terrill, Temple.

16. *The Spontaneous Cure of Tuberculosis by Nature's Processes: A Protest Against the Administration of the Tuberculins of Immunization.*
Dr. Boyd Cornick.....San Angelo
Discussion opened by Dr. I. S. Kahn, San Antonio.

17. *Functional Renal Diagnosis.*
Dr. G. T. Hall.....Big Springs
Discussion opened by Dr. Joe E. Dildy, Lampasas.

18. *Infections or Toxic Arthritis.*
Dr. J. W. Torbett.....Marlin
Discussion opened by Dr. P. J. Shaver, San Marcos.

19. *Orthostatic Albuminuria.*
Dr. K. H. Beall.....Fort Worth
Discussion opened by Dr. Theo. Y. Hull, San Antonio.

20. *Scope of Artificial Pneumothorax.*
Dr. Alvis E. Greer.....Houston
Discussion opened by Dr. E. H. Sauvignet, Laredo.

21. *Artificial Pneumothorax in the Treatment of Pulmonary Tuberculosis.*
Dr. W. C. Farmer.....San Antonio
Discussion opened by Dr. Robt. B. Homan, El Paso.

22. *Report of Cases of Skin Diseases.*
Dr. J. B. Shelmire.....Dallas
Discussion opened by Dr. Cole Smith, San Antonio.

23. *A Resume of Twelve and One-Half Years Experience in the Treatment of Skin Diseases by the X-Ray.*
Dr. Geo. D. Bond.....Fort Worth
Discussion opened by Dr. Joe Gilbert, Austin.

24. *Therapy of the Internal Secretions.*
Dr. H. C. Black.....Waco
Discussion opened by Dr. J. J. Terrill, Temple.

25. *The Ammonia and Acetone Content of the Urine as an Aid in Directing Treatment in Acute Conditions.*
Dr. H. L. Wilder.....Glen Rose
Discussion opened by Dr. Louis J. Manhoff, Aransas Pass.

26. *Obscure Symptoms of Syphilis and So-called Parasyphilitic Diseases; Discussion of Treatment.*
Dr. I. L. McGlasson.....Waco
Discussion opened by Dr. W. L. Allison, Fort Worth.

27. *Treatment of Syphilis of the Central Nervous System.*
Dr. R. B. McBride.....Dallas
Discussion opened by Dr. J. A. McIntosh, San Antonio.

28. *The Diagnosis of Gastric Ulcer, Duodenal Ulcer and Gastric Cancer.*
Dr. Albert Woldert.....Tyler
Discussion opened by H. G. Walcott, Dallas.
29. *Mucous Colitis.*
Dr. Frank Neuhaus.....Houston
Discussion opened by Dr. F. E. Rushing, Fort Worth.
(Section Adjourned.)

GENERAL MEETING AND JOINT SESSION OF ALL SCIENTIFIC SECTIONS

4 to 6 p. m., Hall No. 1, City Hall, Auditorium

1. *Report of Committee on Study of Cancer.*
Dr. W. L. Brown, Chairman.....El Paso
2. *Report of Committee on Study of Pellagra.*
Dr. B. A. Fowler, Chairman.....Brownwood
3. *Report of Committee on Study of Venereal Diseases.*
Dr. H. C. Moore, Chairman.....Houston
4. *Report of Committee on the Study of Cottonseed Meal as a Food for Humans.*
Dr. L. B. Bibb, Chairman.....Austin
5. *Report of Committee on Scientific Work.*
Dr. K. H. Beall, Chairman.....Fort Worth

SECTION ON STATE MEDICINE AND PUBLIC HYGIENE

9 a. m. to 4 p. m., Hall No. 5, Y. M. C. A.

Dr. W. B. Collins, Chairman.....Austin
Dr. J. H. Eastland, Secretary.....Mineral Wells

1. *Chairman's Address.*
2. *Endemic Typhus Fever in South Texas; Report of Four Cases.*
Dr. H. L. McNeil.....Galveston
3. *Typhus Fever: Control and Prevention.*
Dr. C. C. Pierce, U. S. P. H. S.....El Paso
4. *Metabolic Aspect of Pellagra.*
Dr. G. D. Fairbanks, U. S. P. H. S., ...Brownsville
5. *Epidemiology of Pellagra.*
Dr. E. Mack Parrish.....Dallas
Discussion opened by Drs. K. H. Beall, Fort Worth, and R. C. Whiddon, Gainesville.
6. *Some Thoughts on Pellagra.*
Dr. I. L. Van Zandt.....Fort Worth
Discussion opened by Dr. W. L. Allison, Fort Worth.
7. *Public Health Problems of Today.*
Dr. L. H. Reeves.....Decatur
8. *The Physician, His Duties and His Relation to the Community.*
Dr. J. B. McKnight.....Carlsbad
9. *The Reward of the Obscure Physician.*
Dr. M. M. Carrick.....Dallas
10. *Newspaper Publicity in Public Health Work.*
Dr. W. F. Thomson.....Beaumont
11. *The Medical Inspection of Public School Children.*
Dr. C. E. Durham.....Hico
12. *The Whole Time County Health Officer.*
Dr. P. W. Covington, International Health Commission .....Austin
13. *The Fumigation of Ships.*
Dr. R. L. Wilson, U. S. P. H. S.....Galveston
Discussion opened by Drs. J. S. Davidson, State Quarantine Officer, and Walter Kleberg, City Health Officer, Galveston.
14. *Vital Statistics.*
Dr. W. A. Davis.....Austin
15. *Breach of Promise.*
Dr. W. M. Brumby.....Waco
16. *Some Essentials in the Treatment of Tuberculosis.*
Dr. C. M. Hendricks.....El Paso
(Section Adjourned.)

GENERAL MEETING AND JOINT SESSION OF ALL SCIENTIFIC SECTIONS

4 to 6 p. m., Hall No. 1, City Hall, Auditorium

1. *Report of Committee on Study of Cancer.*
Dr. W. L. Brown, Chairman.....El Paso
2. *Report of Committee on Study of Pellagra.*
Dr. B. A. Fowler, Chairman.....Brownwood
3. *Report of Committee on Study of Venereal Diseases.*
Dr. H. C. Moore, Chairman.....Houston
4. *Report of Committee on the Study of Cottonseed Meal as a Food for Humans.*
Dr. L. B. Bibb, Chairman.....Austin
5. *Report of Committee on Scientific Work.*
Dr. K. H. Beall, Chairman.....Fort Worth

SECTION ON GYNECOLOGY AND OBSTETRICS

2 to 4 p. m., Hall No. 4, City Hall, Fourth Floor

Dr. J. A. Hill, Chairman.....Houston
Dr. J. D. Gray, Secretary.....Shiner

1. *Chairman's Address.*
2. *Appendicitis in Pregnant Women.*
Dr. J. H. McLean.....Fort Worth
Discussion opened by Dr. Geo. H. Lee, Galveston.
3. *Congenital Umbilical Hernia.*
Dr. Edgar G. Mathis.....Austin
Discussion opened by Dr. Geo. H. Lee, Galveston.
4. *Eclampsia; Etiology and Management.*
Dr. O. J. Colwick.....Dallas
Discussion opened by Dr. Chas. H. McCollum, Fort Worth.
5. *Toxemia of Pregnancy.*
Dr. Geo. H. Lee.....Galveston
Discussion opened by Dr. C. Jeff Miller, New Orleans.
6. *The Outlook for Better Obstetrical Practice.*
Dr. M. B. Stokes.....Houston
Discussion opened by Dr. G. V. Morton, Fort Worth.
(Section Adjourned to Thursday Morning.)

GENERAL MEETING AND JOINT SESSION OF ALL SCIENTIFIC SECTIONS

4 to 6 p. m., Hall No. 1, City Hall, Auditorium

1. *Report of Committee on Study of Cancer.*
Dr. W. L. Brown, Chairman.....El Paso
2. *Report of Committee on Study of Pellagra.*
Dr. B. A. Fowler, Chairman.....Brownwood
3. *Report of Committee on Study of Venereal Diseases.*
Dr. H. C. Moore, Chairman.....Houston
4. *Report of Committee on the Study of Cottonseed Meal as a Food for Humans.*
Dr. L. B. Bibb, Chairman.....Austin
5. *Report of Committee on Scientific Work.*
Dr. K. H. Beall, Chairman.....Fort Worth

Third Day, Thursday, May 11th

SECTION ON GYNECOLOGY AND OBSTETRICS —Continued

9 a. m. to 5 p. m., Hall No. 4, City Hall, Fifth Floor

7. *Pyelitis of Women.*
   Dr. Chas. H. Harris.....Fort Worth
   Discussion opened by Dr. W. B. Thorning, Houston.
8. *Some Gynecological Percentages, as Applied to the Cancer Problem.*
   Dr. Frank L. Barnes.....Houston
   Discussion opened by Dr. John T. Moore, Houston.
9. *The Use of Radium in the Treatment of Uterine Bleeding Associated With Menopause and Fibromata.*
   Dr. C. Jeff Miller.....New Orleans
   Discussion opened by Dr. John T. Moore, Houston.
10. *Cancer of the Uterus.*
    Dr. S. M. D. Clark.....New Orleans
    Discussion opened by Dr. O. L. Norsworthy, Houston.
11. *Cancer of the Uterus.*
    Dr. Donald C. Balfour.....Rochester, Minn.
    Discussion opened by Dr. A. C. Scott, Temple.
12. *Lesions of the Pelvic Outlet.*
    Dr. Frank B. King.....Houston
    Discussion opened by Dr. H. L. D. Kirkham, Houston.
13. *Cervical Suspension for Retroversion and Prolapse of the Uterus.*
    Dr. Hugh S. White.....El Paso
    Discussion opened by Dr. Geo. H. Lee, Galveston.
14. *Retroversion of the Uterus; Its Treatment.*
    Dr. Frank C. Beall.....Fort Worth
    Discussion opened by Dr. H. M. Doolittle, Dallas.
15. *A Proposed Operation for Retro-Displacement and Prolapse of the Uterus.*
    Dr. John T. Moore.....Houston
    Discussion opened by Dr. J. B. Smoot, Dallas.
16. *Surgical Operations on the Nervous Woman.*
    Dr. W. B. Russ.....San Antonio
    Discussion opened by Dr. F. C. Beall, Fort Worth.
17. *The Importance of Complete Diagnosis in Gynecological Cases.*
    Dr. M. J. Taylor.....Camden
    Discussion opened by Dr. F. L. Barnes, Houston.
18. *Disordered Menstruation as a Symptom of Disease.*
    Dr. H. L. D. Kirkham.....Houston
    Discussion opened by Dr. J. H. Reuss, Cuero.
19. *The Question and Choice of Operation in Gynecological Practice.*
    Dr. Willard R. Cook.....Galveston
    Discussion opened by Dr. Geo. H. Lee, Galveston.
20. *Ovarian Transplantation; Report of Cases.*
    Dr. W. D. Phillips.....New Orleans
21. *Post-Operative Insanity; Report of Case Following Operation for Papillary Cystadenoma of Ovaries.*
    Dr. William Lee Secor.....Kerrville
    Discussion opened by Dr. W. B. Thorning, Houston.
22. *A Study of the Etiology and Treatment of Ovarian Cystomata.*
    Dr. J. H. Lander.....Beeville
    Discussion opened by Dr. J. B. Smoot, Dallas.
23. *The Value of the Prone Position in Gynecology and Obstetrics; Some Reasons for its Use.*
    Dr. J. H. Gambrell.....Dallas
24. *Super-Vaginal Hysterectomy: Indications and Technique.*
    Dr. R. R. White.....Temple

(Section Adjourned.)

GENERAL MEETING

5 to 6 p. m., Hall No. 1, City Hall, Auditorium

Introduction of Newly Elected Officers.

SECTION ON SURGERY

9 a. m. to 5 p. m., Hall No. 1, City Hall, Auditorium

DR. T. T. JACKSON, Chairman.....San Antonio
DR. EDGAR SMITH, Secretary.....Lockhart

1. *Chairman's Address.*
2. *What is an Inoperable Malignancy?*
   Dr. Z. T. Scott.....Austin
   Discussion opened by Dr. John T. Moore, Houston.
3. *Wrist Injuries: Operative Treatment: Lantern Illustrations.*
   Dr. R. W. Knox.....Houston
   Discussion opened by Dr. L. B. Jackson, San Antonio.
4. *Surgery of the Bile Passage.*
   Dr. J. M. T. Finney.....Baltimore, Md.
   Discussion opened by Dr. F. M. Hicks, San Antonio.
5. *Hemorrhagic Tendency in Obstructive Jaundice and Its Pre-Operative Treatment, With Experiments.*
   Dr. F. W. Aves.....Galveston
   Discussion opened by Dr. Chas. M. Rosser, Dallas.
6. *Meckels Diverticulum.*
   Dr. John W. Burns.....Cuero
   Discussion opened by Dr. Wm. Lee Secor, Kerrville.
7. *Senile Hypertrophy of the Prostate, With Lantern Slides.*
   Dr. A. I. Folsom.....Dallas
   Discussion opened by Dr. F. C. Walsh, San Antonio.
8. *Local Anaesthesia.*
   Dr. A. Jacobi.....New Orleans
   Discussion opened by Dr. T. F. Kittrell, Texarkana.
9. *Diagnosis of Acute Osteomyelitis.*
   Dr. W. Burton Thorning.....Houston
   Discussion opened by Dr. K. H. Aynesworth, Waco.
10. *A Study of Acute Infection of Wounds, With Deductions as to Rational Treatment.*
    Dr. Jas. E. Thompson.....Galveston
    Discussion opened by Dr. Harvey Black, Dallas.
11. *Fibroid Degeneration of the Appendix.*
    Dr. Robert T. Morris.....New York City
    Discussion opened by Dr. John S. McCelvey, Temple.
12. *Bacteriology of Operative Room Air, and Its Possible Relation to Wound Infection.*
    Dr. W. L. Brown.....El Paso
    Discussion opened by Dr. D. S. Wier, Beaumont.
13. *Operative Treatment of Fractures.*
    Dr. Robt. L. Ramey.....El Paso
    Discussion opened by Dr. F. C. Beall, Fort Worth.
14. *Is the Diagnosis and Conservative Treatment of Fracture About to Become a Lost Art?*
    Dr. Bacon Saunders.....Fort Worth
    Discussion opened by Dr. Samuel Webb, Jr., Dallas.
15. *Pylephlebitis Caused by Appendicitis.*
    Dr. Frank Paschal.....San Antonio
    Discussion opened by Dr. A. C. Scott, Temple.
16. *Some Remarks on Shock and Report of Case of Acapnia of Toxemia Shock.*
    Dr. O. L. Norsworthy.....Houston
    Discussion opened by Dr. W. B. Russ, San Antonio.

17. *Gunshot Wounds of the Chest Observed in the Turko-Balkan and in the Present European Wars.*
Dr. Edgar L. Gilcreest.....Gainesville
Discussion opened by Dr. H. M. Doolittle, Dallas.
18. *Report of Successful Excision of the Spleen for Traumatic Rupture, Complicated by Traumatic Intestinal Paresis, Malaria and Hookworm.*
Dr. H. A. Barr.....Beaumont
Discussion opened by Dr. Joe Gilbert, Austin.
19. *Some Unusual Observations in Kidney Surgery.*
Dr. Joe Becton.....Greenville
Discussion opened by Dr. Wm. Wolf, San Antonio.
20. *Tendon Fixation.*
Dr. L. A. Suggs.....Fort Worth
Discussion opened by Dr. A. A. Ross, Lockhart.
(Section Adjourned.)

GENERAL MEETING

5 to 6 p. m., Hall No. 1, City Hall, Auditorium

Introduction of Newly Elected Officers.

SECTION ON LIFE INSURANCE

9 a. m. to 1 p. m., Hall No. 4, City Hall, Council Chamber

Dr. D. J. Jenkins, Chairman.....Daingerfield
Dr. Irving McNeil, Secretary.....El Paso

1. *Chairman's Address.*
2. *Cardio-Vascular-Renal Disease.*
Dr. W. A. Boyce.....Dallas
Discussion opened by Dr. J. S. Lankford, San Antonio.
3. *The Kidney, Its Relation to Life Insurance.*
Dr. G. C. Lechenger.....Houston
Discussion opened by Dr. Edward Randall, Galveston.
4. *Medical Selection for Life Insurance; General Observations.*
Dr. John L. Davis.....Waco
Discussion opened by Dr. J. H. Graves, Waco.
5. *The Significance of Albuminuria.*
Dr. C. H. Brooks.....Waco
Discussion opened by Dr. A. E. White, Houston.
6. *The Significance of Casts.*
Dr. Paul Murphy.....Waco
Discussion opened by Dr. W. F. Thomson, Beaumont.
7. *The Interests of the Applicant, the Agent, the Company and the Medical Examiner, as Represented by an Application for Life Insurance.*
Dr. J. S. Wilkins.....Paducah
Discussion opened by Dr. Joe E. Daniel, Wichita Falls.
(Section Adjourned.)

GENERAL MEETING

5 to 6 p. m., Hall No. 1, City Hall, Auditorium

Introduction of Newly Elected Officers.

STATE ASSOCIATION OF COUNTY SECRETARIES

9 a. m. to 1 p. m., Hall No. 5, Y. M. C. A.

Dr. W. H. Hargis, President.....San Antonio
Dr. W. H. Blythe, Vice-President.....Mt. Pleasant
Dr. H. L. Wilder, Secretary-Treasurer.....Glen Rose

1. *President's Address: Who is Who in Organized Medicine.*
2. **Organized Medicine.*
Dr. G. H. Moody.....San Antonio
3. **The Business Side of Organized Medicine.*
Dr. R. R. White.....Temple
4. **Our Journal.*
Dr. Holman Taylor.....Fort Worth
5. **Co-operation of Councilors and Secretaries in the Maintenance of County Societies.*
Dr. N. J. Phenix.....Colorado
6. **Knocking One Another.*
Dr. W. D. Jones.....Dallas
7. *Efficient District Organization.*
Dr. L. J. Manhoff.....Aransas Pass
8. *Collecting Dues and Procuring Attendance.*
Dr. Davis Spangler.....Sherman
9. *The Secretary.*
Dr. F. L. Sargeant.....Victoria
10. *Who is Responsible for the Success of the County Medical Society, and Why?*
Dr. L. H. Reeves.....Decatur
11. *The Importance of Well Written Reports to the State Journal.*
Dr. G. C. Lechinger.....Houston
(Adjourned.)

*These essays will be presented at such time as the official duties of the essayists will permit.

GENERAL MEETING

5 to 6 p. m., Hall No. 1, City Hall, Auditorium

Introduction of Newly Elected Officers.

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1915, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies."

Lysters Prepared Casein Diabetic Flour.—Milk casein to which has been added a leavening mixture, sodium chlorid and saccharine. Used in the form of muffins in diabetes, etc. Lyster Brothers, Andover, Mass. (*Jour. A. M. A.*, February 26, 1916.)

Antistreptococcus Serum Rheumaticus, Squibb.—Produced from strains of streptococcus from the joints and blood of cases of rheumatism. The serum is intended for use in cases of acute articular rheumatism. E. R. Squibb & Sons, New York. (*Jour. A. M. A.*, February 26, 1916.)

PROPAGANDA FOR REFORM.

Hypochlorites in Infected Wounds.—Dakin points out that he claims no credit for the "discovery" of the "new antiseptic." He explains that the "new antiseptic" was discovered by Berthollet in 1788. The solution used by Dakin and others is essentially the well-known Labarraque's solution or solution of chlorinated soda. The claims as to the efficiency of the various modifications which are being used in France and England are decidedly contradictory. The one conclusion which all results with the various hypochlorite solutions appear to justify is that hypochlorites, whether applied in an acid solution, in an alkaline solution or in a neutral solution, are of genuine value in the treatment of infected wounds. (*Jour. A. M. A.*, February 5, 1916.)

Oxybon Declared Fraudulent.—On January 15, 1916, a fraud order was issued by the postmaster-general against the Oxybon Company, Chicago. The Oxybon was one of the gas-pipe frauds, which included the Oxydonor, the Oxypathor, and the Oxygenor. (*Jour. A. M. A.*, February 12, 1916.)

The Therapeutic Value of the Hypophosphites.—At the request of the Council on Pharmacy and Chemistry, Dr. W. M. Marriott, Johns Hopkins University, has examined the evidence for and against the therapeutic value of the hypophosphites. Experiments were carried out to determine the "food" value of hypophosphites. The hypophosphites were introduced into medicine by Churchill in 1858, on the basis of an incorrect theory and utterly insufficient and inconclusive clinical evidence; their use has been continued without justification by any trustworthy evidence for their efficiency. By actual trial on human subjects Marriott shows that at least 85 per cent of the ingested hypophosphites are excreted unchanged. Further, he holds that there is no proof that the remaining 15 per cent is available to the organism. It is doubtful if there are any conditions in which the body suffers from lack of phosphorus. Marriott concludes that there is no reliable evidence that hypohphosphites exert a physiologic effect; it has not been demonstrated that they influence any pathologic process; they are not "foods." If they are of any use, that use has never been discovered. (*Jour. A. M. A.*, February 12, 1916.)

The Effect of Opium Alkaloids on Respiration.—D. I. Macht has reinvestigated the effect of opium alkaloids on respiration. He divides the alkaloids of opium in two classes: In the one class is morphine, the prominent sedative alkaloid, which may not interfere with efficient respiration when the dose of the drug is small. In contrast with this are narcotin, papaverin, narcein, thebain and cryptopin, all of which are stimulants and in large doses are excitants of the respiratory center. Codein belongs to the morphine class, though in large doses it may also excite the respiratory center. The action of mixtures of opium alkaloids is a summation of their individual effects. It thus appears that if the object sought is a reduction of the labored activity of the respiratory muscles in a given case, the drug opium itself or mixtures of its alkaloids are to be preferred to morphine alone. If, on the other hand, it is desired to diminish the excitability of the cough reflex mechanism, it seems that a simple substance, as morphine or dodeine, is to be preferred. (*Jour. A. M. A.*, February 12, 1916.)

Fermented Milk.—While there is no conclusive evidence that Bacillus bulgaricus is able to establish itself in the intestine in such a way that other bacteria are driven out, it is undoubtedly true that in many cases marked improvement has resulted from the ingestion of milk cultures made from it. It is by no means certain, however, that the results which have been obtained by the use of milk cultures have been attributable to any peculiar virtue in the organism itself. The benefical effects of a sour-milk diet is attributable, perhaps, not so much to the bacteria contained in the milk as to the milk itself, which provides material for an acid fermentation in the intestine. Fermented milk is so well tolerated in many cases that their use should in general be encouraged from the standpoint of nutrient values, quite apart from the problematical "autointoxication" propaganda. (*Jour. A. M. A.*, February 19, 1916.)

Diarsenol.—Diarsenol, Synthetic Drug Company, Toronto, Canada, is said to be chemically identical with salvarsan. It has not been examined in the A. M. A. Chemical Laboratory nor do any reports of trials appear to have been published which demonstrate its value or safety. As salvarsan is covered by United States patent the American agents for salvarsan will probably object to the sale in the United States of a substitute. (*Jour. A. M. A.*, February 19, 1916.)

Ducks and Mosquitoes.—A few years ago much was heard about the utility of bats as a means of destroying mosquitoes. According to experiments reported by S. G. Dixon, the most formidable animal enemy of the mosquito is the duck, and the introduction of this bird is recommended for eliminating mosquitoes, and the diseases which these insects spread, from marshy regions where draining would be too costly. Two artificial pools were constructed of equal area, ducks being placed in one and fish in the other. The former pool was quickly freed from mosquito pupae and larvae, while in the other they continued to abound. Wild ducks are said to prefer mosquitoes to all other food.—*Scientific American.*

NEWS

New Officers of State Board of Medical Examiners.—The Texas State Board of Medical Examiners met at Temple, March 6th, for the purpose of electing officers for the ensuing term. Those selected were: Drs. S. L. Scothorn, president; H. C. Morrow, vice-president; J. S. McCelvey, secretary.

Next meeting of the board will be held June 26 to 28, inclusive, at San Antonio. At this session applicants for certificates will be given examination.—*Dallas Times-Herald.*

Disinfection Plant for Juarez.—Arrangements to erect a disinfection plant at Juarez to sterilize clothing of all persons coming from disease-infected districts of Mexico, before they are permitted to enter the United States, were made March 6th, at a conference of General Gabriel Gavira with Dr. C. C. Pierce and Dr. J. W. Tappan, of the United States Health Service.—*San Antonio Light.*

Houston Physicians Lose Appeal in Circuit Court.—Five Houston physicians will have to serve penitentiary terms for using the mails to defraud unless the United States supreme court reverses the decision of the United States circuit court of appeals in New Orleans, March 3rd. N. A. Hughes, T. W. Hughes, August Marables, J. F. Allen, Edward Parlan and O. F. Bourque were charged with operating in Houston, Texas, under the name of "J. F. Allen Specialist," and other names. J. E. Corl and A. G. Olsen were granted new trials. Parlan, one of the defendants, died and, therefore, can not serve the prison sentence, and his case was quashed.—*Beaumont Enterprise.*

Medical Journals Merge.—The American Journal of Gastroenterology has combined with The Proctologist and hereafter will be published (beginning with the March number, first of year) as The Proctologist and Gastroenterologist from St. Louis. Dr. Lewis Brinton, Philadelphia, and Dr. Anthony Bassler, New York, will have editorial charge of Gastroenterology; Dr. A. L. Benedict, Buffalo, editor of Dietetics; Dr. Rollin H. Barnes, St. Louis, will be managing editor and publisher.

Health Insurance.—There has recently been introduced into the State Legislature of New York a bill providing for compulsory health insurance for workers in the State, which aims to supplement the present State Workingmen's Compensation Law by giving medical attention and cash benefit to workers disabled by sickness as well as by accident. The plan differs in principle from the existing industrial accident compensation in that 40 per cent of the cost of the health insurance is to be borne by the workmen themselves, 20 per cent by the State, and 40 per cent by the employers. The bill has been drafted in co-operation with the American Association for Labor Legislation and the American

Medical Association and will cover any sickness or accident not within the scope of the present legislation. It will apply to manual laborers and to all others earning less than $100 a month.—*Medical Record.*

THE ECONOMIC LOSS FROM ANTHRAX IN TEXAS.—During the year 1915, so reports the Texas State Board of Health, the loss in this State from the ravages of anthrax amounted to $250,942. This does not include the loss of range cattle, the extent of which is not known. The number of deaths reported are as follows: Cattle, 3,229; horses and mules, 1,214. The Health Department is urging stockmen and farmers over the State to take the necessary precautions, which have been outlined in a circular letter, recently issued. The State Board of Health and the Live Stock Sanitary Commission, have concurrent jurisdiction in the care of anthrax cases and the prevention of the spread of this disease. In no other disease do these two important bodies cooperate, however, which is perhaps unfortunate. The law requires that all cases of anthrax be promptly reported to the State Board of Health, on the ground that the disease is easily communicable to humans. A complete bulletin bearing on the disease is published by the State Board of Health, which may be had for the asking.

TEXAS VITAL STATISTICS FOR FEBRUARY.—During the month of February there were reported to the Registrar of Vital Statistics, 4,142 births. According to population there should have been 10,135 births during this period of time. Of the births reported, 3,714 were white, and 311 black. Of the white births, 1,910 were male and 1,777 female; in 27, no sex was given. Of the blacks, 159 were male and 130 female; in 22 no sex was given.

During this period there were 2,372 deaths reported, whereas, according to rule, there should have been 4,452 deaths. Of the deaths, there were 1,135 white males, and 868 white females. Of the blacks, 189 were males and 181 females. Of the causes of death, tuberculosis leads with 281, with pneumonia and influenza, each, 207. Bright's disease, and accidental deaths scored 112 each. Organic heart disease killed 93; cancer, all forms, 82, and pellagra, 31. There were 24 homicides and 15 suicides. As to age, 340 were under one year; 165 from 1 to 5 years; 58 from 5 to 10 years; 145 from 10 to 20 years; 260 from 20 to 30 years; 210 from 30 to 40 years; 225 from 40 to 50; 250 from 50 to 60; 255 from 60 to 70; 229 from 70 to 80; 120 from 80 to 90, and 31 over 90 years of age. There was quite a number of deaths at advanced age, the highest being 111 years.

TYPHUS FEVER IN TEXAS.—Typhus fever was reported to the State Board of Health during the month of February, in El Paso, Kinney, Maverick, Webb, Frio and Bexar Counties. This invasion of typhus fever has followed the main lines of travel from the border to the interior of the State. The disease has been confined to Mexicans of recent entry in almost all the cases reported, and has not spread to any extent.

Up to March 15 no new points of infection had been reported except Jones and Hayes counties. In El Paso, Jones and Kinney counties the cases were found in the jails, and in Frio and Hayes counties those infected were found in the brush, and were Mexicans who were making their way into the interior, on foot.

It is impossible to protect the entire Rio Grande border under the conditions that now exist in Mexico, with only four quarantine officers and the limited number of rangers now available. As a matter of self protection, each county should investigate the condition of their jails and rid them of lice; and at the same time keep under close observation all transient Mexicans. Where illegal entry has been effected the United States Immigration Service should be notified, whose duty it is to deport such persons.

No disease is more easily prevented. It can not spread where the infected person is properly handled and all clothing, furniture and houses are properly disinfected. When once introduced unless proper precautions are taken the disease becomes endemic and will remain so as long as the homes of the lower classes are allowed to harbor lice. From such homes the louse is carried to depots, jails, school houses and other public buildings, as well as to street cars, day coaches, sleeping cars and other public conveyances, and the person whose home is free from lice may contract the disease in this manner. The State statutes prescribe that day coaches shall be cleaned after each trip; that interurbans and street cars shall be washed with a hose and scrubbed every 24 hours, and that all sleeping cars shall be cleaned and disinfected in a manner prescribed by the statute twice each seven days. Typhus fever may be prevented by disinfection that will destroy lice. The fumigation that is generally used will not destroy vermin.

SOCIETY NEWS.

EL PASO DISTRICT—No. 1.

Dr. F. P. Miller, El Paso, Councilor.

District Society—Dr. J. M. Britton, Cisco, President; Dr. N. J. Phenix, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

El Paso—Dr. C. F. Braden, El Paso; 1st and 3rd Mondays, September to May inclusive.

Reeves-Ward-Pecos—Dr. O. J. Bryan, Pecos.

THE EL PASO COUNTY MEDICAL SOCIETY met in El Paso, March 6th, with 25 members and the following visitors in attendance: Drs. C. C. Pierce, United States Public Health Service; P. Spring, Pearson, Mex.; E. C. Ashton, Shafter; N. T. Moore, Mexico; O. C. West, Madero, Mexico; P. R. Outlaw, New Orleans; J. M. Britton, Cisco, and W. W. Waite, El Paso.

Dr. Werley presented a pathological specimen, an enormously enlarged heart, showing aortic stenosis, probably the result of smallpox infection. There were calcareous and athermatous deposits in the aorta.

Dr. Jamieson read a paper, *The Treatment of Acute Gonorrhoeal Urethritis.*

Dr. E. B. Rogers read a paper, *The Biology and Treatment of Syphilis.*

The Secretary announced that the program committee had arranged a joint session between the El Paso County Medical Society and the El Paso County Retail Druggists Association for March 20th.

Drs. Witherspoon and Braden were appointed on the Publicity Committee, authorized by resolution of the society, February 15, 1915.

Dr. C. C. Pierce, Senior Surgeon of the United States Public Health Service, discussed the typhus situation on the border, upon special invitation of the society. He said that typhus was one of the oldest known to science, and in the past was a term used to designate what is now called typhoid. A separation was made by Gerhardt in 1837. The discovery of the bacillus of typhoid fever, by Eberth, in 1880, definitely established the latter disease. Typhus fever is very abrupt in its onset, the fever rapidly rising to its highest point, probably within 24 to 26 hours; the face becomes congested, so that the disease resembles somewhat yellow fever during the early stages. The difference between the morning and afternoon temperature is seldom as great as one degree, remaining at nearly the same point

throughout its course, which is ordinarily from 12 to 14 days. Termination is by crisis, covering 24 to 36 hours. The most prominent symptom is an intense headache, and in very mild cases, this may be the only symptom complained of. There is usually severe mental prostration and nearly always some delirium, especially at night. The tongue soon becomes coated, and in a large percentage of cases there is some congestion of the lungs. Constipation is always present. An eruption appears upon the body between the third and fifth day, starting on the abdomen, the sides of the thorax and rapidly spreading to the legs and arms. It is seldom present on the forearms and very rarely on the palms or soles; it never appears on the face. In the milder cases, and occasionally in those of severer type, the rash may be absent. The rash is a maculo-papular eruption, the spots varying in size from 1/12 to ½ of an inch in diameter. It persists until convalescence and the spots will not disappear on pressure.

The old synonyms for the disease are, ship fever, jail fever and camp fever. The disease is transmitted by the bite of a louse, which accounts for its well known epidemiologic features. The disease has been endemic in the higher plateau regions of Mexico for many years, and for the last few years, because of disturbed political and economic conditions, have been quite generally distributed throughout the Republic. It has also recently assumed, in a large percentage of cases, the typical form of the European disease. The disease has also existed in the United States for a number of years, there having been 225 cases in Mount Sinai Hospital, New York, during the period 1906-1910. It was at the time of its discovery described as a new disease by Dr. Brill, from whom it took the name it is ordinarily known under in this country. Drs. Anderson and Goldberger of the United States Public Health Service, proved that Brill's disease was identical with the Mexican typhus.

Persons free from lice will not have the disease, except they are accidentally and temporarily infested. The head louse infests the head only, and the female attaches her eggs to the shaft of the hair near the scalp. The eggs become young lice within five or six days, and they do not differ from the adult except in size. In order to get rid of them, it is best to clip the hair, and to wash the head with a mixture of kerosene oil and vinegar, equal parts, or with ticture of larkspur or infusion of quassia. In the first mixture, the vinegar dissolves the adhesive material, attaching the nit to the hair, and the oil kills the louse. It may be necessary to repeat the dose.

The body louse, or "gray-back," is the primary offender, and the most important from the standpoint of transmission of this disease. It is more prolific than the head louse. The female deposits from eighty to ninety eggs every five or six days. They live, and the female deposits her eggs, on the underclothing, or the clothing near the body. When the clothing is removed the lice leave the body and resort to the various crevises in the garments. They do not attach their eggs to the hairs of the body. It is easy to exterminate these lice, by simply boiling clothing, or submerging them in strong antiseptic solutions, or in kerosene or gasoline.

Quarantine stations have been established all along the Texas-Mexico border, in an effort to prevent the introduction of this disease into the United States. Notwithstanding the precautions that have been taken, 25 cases have been discovered in Texas, 6 of which have terminated fatally. There is no cause for alarm as yet, but physicians should be constantly on the alert for the disease in its mild form, which often escapes identification.

BIG SPRINGS DISTRICT—No. 2.
Dr. N. J. Phenix, Colorado, Councilor.

District Society—Dr. J. M. Britton, Cisco, President; Dr. N. J. Phenix, Colorado, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

***Ector-Midland-Martin-Howard*—Dr. W. F. Johnston, Big Springs; 2nd Thursday quarterly.**

Fisher-Stonewall—Dr. R. I. Grimes, Sylvester; 1st Tuesday in January and March.

Jones—Dr. A. McK. Jones, Anson; 2nd Tuesday monthly.

Knox-Haskell—Dr. Judd E. Hammond, Munday.

Mitchell-Nolan—Dr. T. J. Ratliff, Colorado.

Scurry-Dickens-Kent—Dr. H. E. Rosser, Snyder; 1st Tuesday in January, April, July and November.

Taylor—Dr. R. P. Glenn, Abilene; 2nd Tuesday monthly.

The Fisher-Stonewall County Medical Society announces the election of officers for 1916, as follows: President, Dr. J. T. Bynum, McCauley; vice-president, Dr. W. W. Callan, Rotan; secretary-treasurer, Dr. R. I. Grimes, Sylvester; censors Drs. J. G. Hambright, Roby, and E. R. Sartor, Rotan; delegate, Dr. R. R. Allen, Roby; alternate, Dr. W. W. Callan.

The Jones County Medical Society announces the following officers for 1916: President, Dr. Taylor, Hamlin; vice-president, Dr. T. A. Jones, Stamford; secretary-treasurer, Dr. A. McK. Jones, Anson (re-elected); delegate, Dr. A. D. McReynolds, Stamford; alternate, Dr. R. R. Shapard, Anson; censors, Drs. F. E. Hudson, Anson, and D. Southard, Stamford. Time of meeting, second Tuesday monthly.

The Knox-Haskell County Medical Society announces the following officers for 1916: President, Dr. T. S. Edwards, Knox City; vice-president, Dr. W. M. Rogers, Rule; secretary-treasurer, Dr. J. E. Hammond, Munday; censors, Drs. W. P. Farrington, Munday, H. C. Weaver, Rule, and L. F. Taylor; committee on public health and legislation, Drs. G. P. Gibner, Haskell, W. H Dunn, Rochester and W. A. Kimbrough, Haskell; delegate, Dr. W. P. Farrington; alternate, Dr. W. H. Dunn.

The Mitchell-Nolan County Medical Society announces the following officers elected for 1916: President, Dr. P. C. Coleman, Colorado; vice-president, Dr. H. C. Scott, Sweetwater; secretary-treasurer, Dr. T. J. Ratliff, Colorado; censors, Drs. Wm. Burk, A. A. Chapman and W. M. Copeland; delegate, Dr. L. O. Dudgeon, Sweetwater; alternate, Dr. J. W. Young, Roscoe.

PANHANDLE DISTRICT—No. 3.
Dr. C. R. Hartsook, Wichita Falls, Councilor.

District Society—Dr. S. P. Vinyard, Amarillo, President; Dr. J. J. Crume, Amarillo, Secretary.

Secretaries of Sections—Surgery, Dr. J. J. Hanna, Quanah; Medicine, Dr. Wade H. Walker, Quanah; Gynecology and Obstetrics, Dr. G. T. Thomas, Amarillo.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Childress—Dr. R. B. Wolford, Childress; 1st Tuesday monthly.

***Collingsworth*—Dr. H. B. Worley, Wellington; Tuesdays.**

***Dallam-Hartley-Sherman*—Dr. R. L. Owens, Dalhart; 2nd Tuesday.**

***Donley*—Dr. T. H. Ellis, Clarendon; 1st Thursday monthly.**

Foard—Dr. R. L. Kincaid, Crowell; 2nd Monday quarterly.

Hale-Swisher—Dr. A. H. Lindsay, Plainview; 2nd Tuesday monthly.

Hall—Dr. W. C. Mayes, Memphis; 2nd Tuesday monthly.

Hardeman—Dr. T. D. Frizzell, Quanah; 2nd Thursday monthly.

Hemphill-Roberts-Lipscomb-Ochiltree—Dr. H. C. Caylor, Canadian; 1st Monday monthly.

Lubbock-Crosby—Dr. J. T. Hutchinson, Lubbock; 1st and 3rd Tuesdays monthly.

Potter—Dr. J. J. Crume, Amarillo; 2nd Monday monthly.

Wichita—Dr. Q. B. Lee, Wichita Falls; 2nd Tuesday monthly.

Wilbarger—Dr. Richard W. Hix, Vernon; 3rd Monday monthly.

THE FOARD COUNTY MEDICAL SOCIETY have elected the following officers for 1916: President, Dr. Hines Clark, Crowell; vice-president, Dr. J. M. Hill, Crowell; secretary-treasurer, Dr. R. L. Kincaid, Crowell; delegate, Dr. Hines Clark; alternate, Dr. J. M. Hill.

THE HARDEMAN COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. J. S. Wilkins, Paducah; vice-president, Dr. J. J. Hanna, Quanah; secretary-treasurer, Dr. T. D. Frizzell, Quanah; censors, Drs. J. T. Horton, Quanah, A. J. Ball, Quanah, and R. R. McDaniel, Quanah; committee on public health and legislation, Drs. T. O. Wilkins, Paducah, R. R. McDaniel and J. J. Hanna; delegate, Dr. J. J. Hanna; alternate, Dr. R. R. McDaniel.

THE WILBARGER COUNTY MEDICAL SOCIETY announces the following officers elected for 1916: President, Dr. H. H. Rhoads, Vernon; vice-president, Dr. T. A. King, Harrold; secretary-treasurer, Dr. R. W. Hix, Vernon; censors, Drs. J. E. Dodson, Howard Reger and B. D. Flaniken; committee on public health and legislation, Drs. J. C. King, A. B. Garland and J. E. Dodson, Jr.; delegate, Dr. R. W. Hix; alternate, Dr. Minnie O. Parrish.

DISTRICT PERSONAL.—Dr. T. O. Wilkins, Paducah, is in Fort Worth for treatment, at the St. Joseph's Infirmary.

SAN ANGELO DISTRICT—No. 4.

Dr. S. C. Parsons, San Angelo, Councilor.

District Society—Dr. J. S. Anderson, Brady President; Dr. R. H. Cochran, Coleman, Secretary. Next meeting will be in Brady.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Brown—Dr. J. W. Carson, Brownwood; 2nd Tuesday monthly.
Coleman—Dr. W. M. Strozier, Santa Anna; 1st Thursday monthly.
Lampasas—Dr. J. W. Ellis, Lampasas; 1st Tuesday March, June, September and December.
McCulloch—Dr. J. S. Anderson, Brady; 1st Monday monthly.
Menard-Kimble—Dr. J. A. Leggett, Menard.
Runnels—Dr. E. R. Middleton, Winters; 2nd Thursday monthly.
Tom Green—Dr. G. W. Nibling, San Angelo; Tuesday before full moon.

THE LAMPASAS COUNTY MEDICAL SOCIETY met in Lometa, March 7, 1916, with seven members present. Dr. J. A. Monk of Kempner, formerly a member of McLennan County Medical Society, was elected to membership. Dr. W. M. Lowe of Lometa read a paper on the *Uses and Abuses of Quinine*. Almost every member had some interesting or unusual clinical case to report. The society adjourned to meet in Lampases on the first Tuesday after the first Monday in June, 1916.

THE MENARD-KIMBLE COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. D. S. Stone, Junction; vice-president, Dr. W. M. Fenley, Menard; secretary-treasurer, Dr. J. A. Leggett, Menard; delegate, Dr. Fred Burt, Junction; alternate, Dr. J. A. Leggett, Menard.

SAN ANTONIO DISTRICT—No. 5.

Dr. W. A. King, San Antonio, Councilor.

District Society—Dr. E. H. Sauvignet, Laredo, President; Dr. L. J. Manhoff, Aransas Pass, Secretary. Next meeting will be in Laredo, September 12-13.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Atascosa—Dr. W. E. Seale, Charlotte; 2nd Tuesday monthly.
Bexar—Dr. W. H. Hargis, San Antonio; from October to May, 1st Thursday, Section on Eye, Ear, Nose and Throat; 2nd Thursday, Section on Medicine; 3rd Thursday, State Medicine, Public and Personal Hygiene; 4th Thursday, Obstetrics and Gynecology.
Comal—Dr. L. G. Wille, New Braunfels; 2nd Saturday quarterly.
Guadalupe—Dr. A. H. Neighbors, Seguin; 1st Tuesday monthly.
Gonzales—Dr. W. T. Dunning, Gonzales; 1st Monday monthly.
Karnes—Dr. R. C. Youngblood, Falls City; bi-monthly.
Kerr-Kendall-Gillespie-Bandera—Dr. Wm. Lee Secor, Kerrville; 1st Monday alternate months.
La Salle-Frio—Dr. R. L. Graham, Cotulla; meets quarterly.
Medina—Dr. J. H. Fletcher, Hondo; 2nd Wednesday monthly.
Uvalde-Edwards—Dr. S. B. Hudson, Sabinal; 1st Tuesday monthly.
Val Verde—Dr. D. A. York, Del Rio; 1st Monday monthly.
Wilson—Dr. J. E. Sparks, Floresville; quarterly.

THE GONZALES COUNTY MEDICAL SOCIETY held its regular meeting at Gonzales, March 6. Ten members and one visitor were present. The following papers were read and freely discussed: *Diagnosis of Malaria*, Dr. W. T. Dawe; *Pernicious Malaria*, Dr. A. B. Parr; *Treatment of Malaria*, Dr. Geo. Holmes.

THE SOUTHWEST TEXAS DISTRICT MEDICAL SOCIETY met in San Antonio, March 14-15, in the new quarters of the Bexar County Medical Society, with 114 members in attendance.

The following program was rendered: *Invocation*, Rev. Philip Cook; *Address of Welcome on Behalf of Bexar County Medical Society*, Dr. P. I. Nixon, Vice-President; *Response*, Dr. E. H. Sauvignet, President; *Traumatic Neurasthenics*, Dr. T. T. Jackson, San Antonio; *Uterine Displacement, With Special Reference to Retroflexion and Retroversion*, Dr. M. J. Perkins, Alice; *Modern Obstetrics as Observed in Lying-in Hospitals*, Dr. J. A. Wall, San Antonio; *Symposium on Gastric Ulcer: Etiology and Pathology*, Dr. Z. T. Scott, Austin; *Diagnosis of Gastric Ulcer*, Dr. R. R. White, Temple; *Relation of Gastric Ulcer to the Occurrence of Carcinoma*, Dr. S. T. Lowery, San Antonio; *Some of the Surgical Procedures for the Relief of Gastric Ulcer*, Dr. C. S. Venable, San Antonio; *The Use of the X-Ray in Diagnosis of Pulmonary Tuberculosis, Illustrated*, Dr. I. S. Kahn, San Antonio; *Intravenous Injection of Bichloride of Mercury in the Treatment of Syphilis*, Dr. Thad Shaw, San Antonio; *Tetanus, With Report of a Case*, Dr. L. L. Shropshire, San Antonio; *Typhoid Vaccine From a Therapeutic View Point*, Dr. M. W. Wooten, San Antonio. The papers were all thoroughly discussed.

A motion carried that an editor be appointed by each component county society, to forward papers for publication, and medical news to the editorial staff of the official organ, *Medical Annals;* present county secretaries to act in such capacity until appointment is made.

The banquet was held in the Menger Hotel, about 70 members attending. Dr. George H. Moody, President of the State Medical Association acted as toastmaster. The following responded to short toasts: Drs. E. H. Sauvignet, P. I. Nixon, W. N. Wardlaw, W. A. King, F. M. Hicks, L. J. Manhoff, E. V. DePew, C. P. Yeager, W. B. Russ, W. H. Hargis, Herbert Caldwell, L. L. Shropshire, H. T. Wilson, J. S. Steele, Malone Duggan, T. D. Dorbandt and D. Largen. The next meeting will be held September 12 and 13, in Laredo.

THE WILSON COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. J. W. Oxford, Floresville; vice-president, Dr. A. W. Irwin, Floresville; secretary-treasurer, Dr. J. E. Sparks, Floresville; delegate, Dr. S. Petrie, Floresville; alternate, Dr. J. W. Oxford, Floresville.

CORPUS CHRISTI DISTRICT—No. 6.

Dr. W. N. Wardlaw, Corpus Christi, Councilor.

District Society—Dr. E. H. Sauvignet, Laredo, President; Dr. L. J. Manhoff, Aransas Pass, Secretary. Next meeting will be in Laredo, September 12-13.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bee—Dr. E. P. Cayo, Beeville; Monday quarterly.
Cameron—Dr. O. V. Lawrence, Brownsville; 2nd Wednesday monthly.
Hidalgo—Dr. W. R. Dashiell, Mission; 5th day monthly
Jim Wells—Dr. M. J. Perkins, Alice.
Kleburg—Dr. R. L. Mathews, Kingsville.
Nueces—Dr. A. W. Davisson, Corpus Christi; 1st and 3rd Fridays monthly.
Refugio—Dr. Roy T. Goodwin, Sinton.
San Patricio—Dr. Roy T. Goodwin, Sinton.
Webb—Dr. E. H. Sauvignet, Laredo; 1st Wednesday monthly.

THE CAMERON COUNTY MEDICAL SOCIETY has elected the following officers for 1916: President, Dr. B. O. Works, Brownsville; vice-president, Dr. E. E. Dickason, Brownsville; secretary-treasurer, Dr. O. V. Lawrence, Brownsville; censors, Drs. C. W. Letzerich, Harlingen, J. L. Rentfro and H. K. Loew of Brownsville; committee on public health and legislation, Drs. C. R. Byars, G. D. Fairbanks and H. K. Loew; delegate, Dr. H. K. Loew; alternate, Dr. C. R. Byars

THE SAN PATRICIO COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. J. W. Vermillion, Sinton; vice-president, Dr. F. S. Whitacre, Sinton, secretary-treasurer, Dr. Roy T. Goodwin, Sinton; censors, Drs. W. Noble, F. S. Whitacre and Roy T. Goodwin; delegate, Dr. L. J. Manhoff, Aransas Pass; alternate, Dr. C. O. Watson, Corpus Christi.

THE WEBB COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. H. C. Hall, Laredo; vice-president, Dr. M. T. Leal, Laredo; secretary-treasurer, Dr. E. H. Sauvignet, Laredo; censors, Drs. H. J. Hamilton, W. E. Lowry and F. G. Gongora; delegate, Dr. J. T. Halsell; alternate, Dr. E. H. Sauvignet.

AUSTIN DISTRICT—No. 7.

Dr. T. J. Bennett, Austin, Councilor.

District Society—Dr. Z. T. Scott, Austin, President; Dr. W. A. Harper, Austin, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bastrop—Dr. P. Chapman, Smithville; 2nd Tuesday bimonthly.
Burnet—Dr. H. S. Garrett, Bertram.
Caldwell—Dr. L. L. Hewlett, Lockhart; 2nd Tuesday monthly.
Hays—Dr. P. J. Shaver, San Marcos.
Lee—Dr. C. S. Gates, Giddings; 1st Monday in March, June, September and December.
Llano—Dr. C. F. Darnall, Llano; 2nd Tuesday monthly.
San Saba—Dr. C. L. Behrns, Cherokee; 2nd Tuesday each month.
Travis—Dr. Edgar Mathis, Austin; 2nd Thursday monthly.
Williamson—Dr. W. G. Pettus, Georgetown; 2nd Wednesday.

THE SAN SABA COUNTY MEDICAL SOCIETY announces the election of the following officers for 1916: President, Dr. S. W. Rimmer, San Saba; secretary-treasurer, Dr. C. L. Behrns, Cherokee (re-elected); censors, Drs. W. S. Sanderson, San Saba and A. D. Nelson, Richland Springs; committee on public health and legislation, Drs. E. M. Burleson and A. D. Nelson; delegate, Dr. A. D. Nelson; alternate, Dr. W. S. Sanderson.

THE TRAVIS COUNTY MEDICAL SOCIETY met March 9, with thirty members and four visitors present. Dr. Hilgartner read a paper on *Medical Ethics*. The discussion was by Drs. Pettway, Murray, Oatman, Smartt, Lacey, Granberry and Joe Gilbert.

Attorney General B. F. Looney gave a very interesting talk on *The Medical Practice Act*, its origin and stormy voyage through the Thirtieth Legislature, and the good that it was now doing for the profession and the people over this State. Also a number of questions from the various members were taken up in order and answered by General Looney. A vote of thanks was extended him by the society.

Dr. Garcia presented an interesting clinical case for examination—pulmonary tuberculosis, with some symptoms suggestive of an aneurysm of the subclavarian artery.

Drs. E. T. Morris and Clarence Weller, were elected to membership.

The President appointed Drs. Bennett, Joe Gilbert and Hilgartner, as the Committee on Public Health and Legislation. Luncheon was served after adjournment.

DEWITT DISTRICT—No. 8.

Dr. Walter Shropshire, Yoakum, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Colorado—Dr. W. G. Youens, Colorado; 2nd Wednesday February, April, June, August, October and December.
DeWitt—Dr. B. J. Nowierski, Yorktown; 3rd Wednesday monthly.
Fayette—Dr. C. M. Hoch, LaGrange.
Lavaca—Dr. Walter Shropshire, Yoakum; 2nd Tuesday monthly.
Matagorda—Dr. S. A. Foote, Bay City; 2nd Wednesday monthly.
Victoria-Calhoun—Dr. F. L. Sargeant, Victoria; 20th monthly.
Wharton-Jackson—Dr. C. W. Gray, El Campo; 3rd Friday monthly.

THE DEWITT COUNTY MEDICAL SOCIETY met at Cuero, March 15. There were 12 members present, and one visitor, Dr. Kirkland of Goliad.

Dr. Eckhardt gave a resume of the first and second, and Dr. Pridgen of the third and fourth numbers of *The Journal of the A. M. A.*, for February. Dr. Holland read a paper on *Ectopic Gestation*. Dr. Burns read a paper on *Procidentia Uteri*. Both papers and the resumé were discussed by those present. The President appointed as a Committee on Public Health and Legislation, for the year 1916, Drs. R. Westphal, Yorktown; H. H. Brown, Yorktown, and J. E. Pridgen Thomaston. After arranging a program for the next meeting, the society adjourned to meet the third Wednesday of April.

THE MATAGORDA COUNTY MEDICAL SOCIETY met in Bay City, March 10. Dr. Walter Shropshire, Councilor, was present and made a talk on ethics and other matters with which the society was concerned. Dr. J. Whit Harrison was received on transfer from the Colorado County Medical Society.

The members all showed an active interest in the welfare of the society and manifested a desire to do better and more enthusiastic work.

The following resolution was adopted by unanimous vote, and ordered published in the JOURNAL.

Whereas, the Texas Surgical Society, which is composed of surgeons doing surgery exclusively, has seen fit to have published in the lay press of this state the address of its president, and

Whereas, this address contains and has to do with matters concerning the whole profession, and with which we believe a large percentage of our members do not agree, and

Whereas, we believe the impropriety of taking these things before the public for discussion is evident and plain, there being no possible good to accrue therefrom, but only misunderstanding and confusion in the public mind, therefore

Be It Resolved by the Matagorda County Medical Society that we heartily condemn this act of the Texas Surgical Society as unwarranted and without precedent in medical organization in Texas, and we resent and deny many of its imputations and direct statements as to facts.

SOUTHERN DISTRICT—No. 9.

Dr. W. W. Ralston, Houston, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Austin—Dr. Otto E. Steck, Bellville; 1st Tuesday quarterly.
Brazos—Dr. R. J. Hunnicutt, Bryan.
Brazoria—Dr. J. D. Motheral, Angleton; 1st Thursday after 1st Monday.

Burleson—Dr. T. L. Goodnight, Caldwell.
Fort Bend—Dr. R. M. Munroe, Richmond.
Galveston—Dr. W. S. Carter, Galveston; last Friday monthly.
Grimes—Dr. E. A. Harris, Navasota; 1st Wednesday monthly.
Harris—Dr. G. C. Lechenger, Houston; every Friday night.
Madison—Dr. J. E. Morris, Madisonville; last Tuesday monthly.
Montgomery—Dr. H. W. Earthman, Conroe; 2nd Monday monthly.
Waller—Dr. R. E. Bing, Waller; 1st Monday quarterly.
Walker—Dr. J. W. Thomason, Huntsville; 2nd Tuesday bi-monthly.
Washington—Dr. R. H. Lenert, Brenham; quarterly.

The Burleson County Medical Society announces the following officers for 1916: President, Dr. A. G. Kreuger, Caldwell; vice-president, Dr. C. A. Sherrill, Caldwell; secretary-treasurer, Dr. T. L. Goodnight (re-elected), Caldwell; censors, Drs. C. A. Sherrill and J. B. Honeycutt; delegate, Dr. W. P. Richardson, Somerville; alternate, Dr. J. B. Honeycutt.

The Galveston County Medical Society have elected the following officers for 1916: President, Dr. Geo. H. Lee, Galveston; vice-president, Dr. H. P. Cooke, Galveston; secretary-treasurer, Dr. W. S. Carter, Galveston; censors, Drs. Henry C. Hartman, W. F. Starley and W. F. Spiller.

The Harris County Medical Society met in Houston, March 4th, with 98 members and 2 visitors present. Dr. E. L. Goar reported the case of a woman, aged 35, who for the past 14 years had had a discharge from the left ear. She had recently suffered an attack of grip, and for several days there had been a continuous hemorrhage from the diseased ear. Below the ear, there was a pouch-like, fluctuating excavation, pressure upon which caused blood to flow from the meatus. Packing and compression failed to check the hemorrhage. Transfusion failed to save the patient's life, and post mortem revealed that a cavity had been formed, extending from the tip of the mastoid process to the jugular bulb, which had been perforated.

Dr. Boyles presented a patient who had been burned by a flash from a high tension electric current. The frontal and nasal bones and the phalanges of the right hand, had been exposed. The treatment consisted entirely of liberal applications of petroleum jelly. Healing took place rapidly and with practically no scarring. In discussing the case, the consensus of opinion was that burns from this source were more severe than ordinary burns, because both the epithelium and underlying tissues were killed to a much greater extent. Dr. Van Zandt said that *x*-ray burns were very similar to the electric flash burns, except that they took place over a longer period of time, and were for that reason insidious.

Dr. R. W. Knox reported a case of housemaids knee in man, in which a number of sesamoid bodies were found floating in the synovial fluid, upon operation. In discussing the case, Dr. Shearer said that he had on one occasion attempted to treat such a case by the usual method of injection of iodine and carbolic acid, but had no success until he produced permanent drainage.

Dr. R. W. Knox read a paper, *Wrist Injuries, Their Operative Treatment.* Emphasis was laid on the possibility of mistaking fracture of small bones of the wrist for simple sprains, which mistakes might possibly be eliminated by the use of the *x*-ray. Operation is frequently indicated in these cases because of the fact that one or more fragments are displaced, with the tearing away of ligaments through which the small bones get their blood supply, for which reason the fragments practically always fail to unite, and unless removed remain as foreign bodies. Also, the small bones may be easily replaced under general anesthesia, but returning muscular tension usually reproduces the dislocation. Dr. Knox prescribes his operation, which differs somewhat from the usual.

Dr. Priester considered the principal lesson to be gained from the paper is that the *x*-ray should be more freely used in this class of cases.

Dr. Red thinks that reduction is possible in many of these cases, and that operative procedure should be postponed until ordinary treatment has proven unsuccessful.

The Harris County Medical Society met in Houston, March 11, with 58 members present.

Dr. L. D. Raney reported three cases of pellagra, in which auto-serum obtained by raising a fly blister on the patient, was used. In the first case reported, a woman, aged 45, who had always had good health until the year previous, and who had raised a family of ten children, presented typical and severe symptoms of the disease. Her diet had been largely vegetarian, although she had from time to time eaten "hog meat." The bread portion of her diet had been principally of bolted corn meal. Five injections of the serum were given from May 1st to June 20th. All symptoms have disappeared.

The second case was that of a woman, 59 years of age, who had lived in the country until a few years ago. Her food was that usually found on the farm. The disease became evident about a year ago, and has been typical. The injections were given June 14, 22 and 29, July 6, 13 and 27. Only local treatment was used otherwise. By August 1st, the symptoms has entirely disappeared, only to return in the latter part of October since which time the serum has failed to have any noticeable effect.

The third case was one of the more severe type, and the patient was almost insane. Two injections produced some improvement in the skin symptoms, but there was no improvement otherwise and the patient died about two weeks after the first injection.

Dr. Scardino said that the city had tried every form of treatment recommended, and that he had come to the conclusion that the only hope of success in this class of cases lay in dietetic and supportive treatment. He now gives only simple tonics, and a diet extremely rich in protein constituents. He thinks the diarrhoea is helped by the picric acid treatment.

Dr. York thinks that arsenic and iron is indicated in pellagra, and administers these remedies in the form of iron arsenite, once a day. He also advocates the use of picric acid in the treatment of the diarrhoea.

Dr. Hodges does not see how the use of autogenous serum can be of any more benefit than would the injection of blood taken from the vessels in one arm and injected into the vessels of the other.

Dr. Goar quoted Dr. Roberts as saying at the Dallas meeting of the Southern Medical Association, that he had never seen a case of pellagra cured, and that the disappearance of symptoms for a few months could not be considered a cure. Dr. Goar thinks the best work in pellagra of late years has been done by Dr. Goldberger of the United States Public Health Service, in his dietary experiments and treatment.

Dr. Gilliam reported a number of cases that had been favorably influenced by the use of the autoserum method under discussion.

Dr. Boyles exhibited a patient whose hands had been so severally crushed that the circulation had at the time seemed to be entirely destroyed. In preparing for amputation, it appeared that circulation was returning to the member, and amputation was abandoned, a proper splint being used instead. It appears that the patient will eventually have a very useful hand.

Dr. B. T. Vanzant read a paper on *Some Problems in Medical Ethics.* He advanced the following general propositions: (1) The radiologist by virtue of his special knowledge and training, should be considered as a consultant, and his fees left to his own discretion; (2) the ownership of plates made in consultation should be vested in the radiologist, so that in case of litigation, there could be no chance of substitution, and the plate could be positively identified in court, and that the plate is the radiologist's record of the case; (3) prints should not be promiscuously distributed, because they do not show the true condition, and are easily interpreted, and because they may form the basis of legal action against some physician who had been connected with the case; (4) the information obtained as a result of the *x*-ray consultation should be available only to the physician referring the case, except upon his consent; (5) the report of the radiologist should be submitted to the referring physician, as he is best able to reconcile differences between the diagnosis and findings; (6) in the matter of cost, it is cheaper for the referring physician to permit the patient to pay the fee for the consultation, than to assume the risk himself.

Dr. Norsworthy urged the importance of photographing fractures and dislocations, and thinks physicians make a mistake in attempting to price this service to their patients, and in giving the impression that it is the picture and not the diagnosis that is the real object of the examination. He thinks the plate belongs to the radiologist and the information to the patient.

Dr. Thorning warns that in damage suits, the law requires physicians to give the kind of service prevalent in the community, and that the opinion should not become too general that the *x*-ray is a requisite. In some states the courts require an *x*-ray as evidence in damage suits, but in this State, the courts have not ruled on that point. He thinks the examination is in the nature of a consultation, and that the radiologist should set his own fee. He thinks the radiologist should give his diagnosis to the patient. He would not himself assume the responsibility for treating a fracture, except he could have a good *x*-ray examination made.

Dr. Cronin thinks that if the patient is poor, the physician would have a legitimate excuse for not advising *x*-ray examination.

Dr. Sauerman thinks a radiographer should have control of the plates, and should protect the referring physician. He recited an incident in which such an examination revealed the presence of a needle in a patient's back. The surgeon was given an opportunity to protect himself, and a lawyer who was interested in suing the surgeon was denied the privilege of examining the plate.

Dr. Lancaster thinks the radiographer should be considered as a consultant, and that his opinion should be given in the presence of the patient and the referring physician.

Dr. Hodges thinks that it is the poorer class of patients who usually give trouble in the court, and that they should be invariably advised to have a picture made.

The Harris County Medical Society met in Houston, March 18.

Dr. T. W. Shearer exhibited a patient suffering with multiple fibromatosis and melanosarcomatosis. Dr. Patterson, discussing the case, said that he had seen a case of this character having 680 tumors, ranging in size from a pin head to that of an egg. Necropsy showed widespread involvement of all internal organs.

Dr. Goar believes the term melano-sarcoma is probably a misnomer, as it has not yet been determined whether the tumor cells are really connective tissue elements or not. He thinks that *melanoma* would be a better name, as it is the pigment cell that forms the distinguishing characteristic of the tumor.

Dr. Hodges reported again on a case that he brought to the attention of the society two years before, a boy with hemophilia. At first small cuts would bleed for from six to seven days. Horse serum was used with good results, the coagulation time being markedly shortened.

Dr. Goar reported a case of tetanus, following a splinter wound, in which intensive intraspinous treatment with serum, supplemented by hypodermic injections of the serum, had been followed by recovery.

Dr. Hodges said that while in New York he had heard a discussion of the use of antitetanic serum, and that the concensus of opinion was that the serum did little or no good after symptoms of the disease had developed.

Dr. Michael said he considered Dr. Goar's case a very mild one and that it was hardly a fair test as to the efficiency of the serum.

Dr. John T. Moore read a paper, *A Proposed Operation for Retrodisplacement and Prolapse of the Uterus.* The operation advised is only indicated in women who are no longer able to bear children, and is as follows: Two flaps are made from the anterior sheath of the rectus muscle; forceps are passed through the fundus uteri, from right to left, care being taken not to enter the cavity of the uterus; the flaps are then drawn through the openings thus made, in such manner that the free end of the left flap protrudes from the opening on the right of the fundus, while the free end of the right flap protrudes from the left of the fundus; the free end of each flap is sewed to the proximal portion of the flap from the opposite side, and by this means forms an artificial supporting ligament.

Dr. Pritchett thought the procedure quite rational.

Dr. Gavin Hamilton did not think it possible to improve on nature, and that the rational thing was to repair the injury in the perineum, which had been the cause of the displacement. There is always a hernia in Douglas' pouch, the repair of which at the time of correction of the prolapse, would often prevent a second operation.

Dr. Wm. Kieller of Galveston, thought Dr. Moore should be congratulated on the operation. He thinks it impossible to reproduce conditions as nature made them. He thought it might be well to try suspending the anterior vaginal fornix. He described an operation by Kelly, in which the uterus is split, the mucous membrane dissected out, and the remainder buried in the anterior tissues of the pelvis. He thought that good support ought to be obtained by doing the operation in this manner, except that the two portions of the uterus should be buried in the psoas muscles, instead of the tissues of the pelvis.

At the close of the meeting, Dr. John T. Moore presented Dr. Wm. Kieller with a check for $100, as a mark of appreciation from the society for his trouble in preparing and presenting the series of lectures, and the meeting resolved itself into an informal reception in honor of the guest.

SOUTHEASTERN DISTRICT—No. 10.

Dr. A. R. Sholars, Orange, Councilor.

District Society—Dr. E. A. Malsch, Victoria, President; Dr. W. F. Thomson, Beaumont, Secretary. Next meeting to be held in Houston, April 6-7, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Hardin—Dr. Lee Selman, Olive; last Saturday monthly.

Jasper-Newton—Dr. D. McMicken, Kirbyville; 4th Wednesday quarterly.

Jefferson—Dr. B. P. Holland, Beaumont; 1st Monday monthly.

Nacogdoches—Dr. T. J. Blackwell, Nacogdoches: 2nd Wednesday monthly.
Orange—Dr. J. P. Hewson, Orange; 1st Tuesday monthly.
Polk—Dr. T. H. Bates, Camden; 1st Wednesday monthly.
Sabine—2nd Wednesday monthly.
Shelby—Dr. J. G. Rushing, Center; 2nd Tuesday monthly.

THE SHELBY COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. J. H. Windham, Shelbyville; vice-president, Dr. P. C. Clements, Timpson; secretary-treasurer, Dr. J. G. Rushing, Center; censors, Drs. J. B. Sims, Center, T. L. Hurst, Neuville and A. W. Duke, Center; committee on public health and legislation, Drs. E. S. Carroll, Center, W. C. Windham and T. F. Whitesides; delegate, Dr. T. F. Whitesides, Timpson; alternate, Dr. J. H. Windham.

EASTERN DISTRICT—No. 11.

Dr. C. C. Nash, Palestine, Councilor.

District Society—Dr. G. G. Bell, Tyler, President; Dr. W. O. Funderburk, Palestine, Secretary. Next meeting will be held in Jacksonville.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Anderson—Dr. E. B. Parsons, Palestine; every Monday night.
Angelina—Dr. J. C. Van Nuys, Lufkin; 1st Tuesday monthly.
Cherokee—Dr. T. H. Cobble, Rusk; 4th Tuesday monthly.
Freestone—Dr. E. V. Headlee, Teague; 1st Tuesday monthly.
Henderson—Dr. A. H. Easterling, Athens; 1st Mondays.
Houston—Dr. W. W. Latham, Crockett; 2nd Tuesday monthly.
Leon—Dr. D. C. Carrington, Marquez; 1st Tuesday in April; 2nd Tuesday in October.
Panola—Dr. A. M. Baker, Carthage.
Rusk—Dr. W. P. White, Henderson; 2nd Tuesday quarterly.
Smith—Dr. Hubert Ferrell, Tyler; 2nd Tuesday monthly.
Trinity—Dr. W. H. Pope, Jr., Trinity; 3rd Thursday monthly.

THE ELEVENTH DISTRICT MEDICAL SOCIETY met in Tyler, March 15. The program was rendered as follows: *Syphilitic Insanity and Its Relation to Paresis*, Dr. C. L. Gregory, Greenville. The paper was discussed by several, and many authorities were quoted stating that 606 does not cure paresis. *Intravenous Injection of Quinine in Malaria*, Dr. B. F. Bell, Tyler. In discussing the paper, Dr. Birdwell of Omen, said he had a record of 13 cases of black jaundice, which he treated by intramuscular injections, with recovery in each case. Dr. Bell did an intravenous injection of sodium cacodylate to illustrate the method of injecting quinine. *Senile Hypertrophy of the Prostate*, Dr. A. I. Folsom, Dallas. *Some Common Expressions Used by the Profession to Knock One Another*, Dr. W. D. Jones, Dallas. *Report of Three Interesting Surgical Cases*, Dr. A. P. Baldwin, Tyler. *Radiographic Study of Gastric Ulcer and Gastric Cancer* (Illustrated with lantern slides), Dr. J. M. Martin, Dallas. *Differential Diagnosis of Appendicitis*, Dr. M. P. Stone, Dallas. *Traumatic Cataract Followed by Glaucoma; Operation and Results*, Dr. Edgar H. Vaughn, Tyler.

A vote of thanks was given the visiting contributors.

The following officers were elected: President, Dr. G. G. Bell, Tyler; first vice-president, Dr. J. M. Travis, Jacksonville; second vice-president, Dr. J. A. Birdwell, Omen; secretary-treasurer, Dr. W. O. Funderburk, Palestine. The next meeting will be held in Jacksonville.

The social features consisted of an automobile ride over some of the good roads of Smith County, by the Y. M. B. L. of Tyler. A most enjoyable luncheon was given the members by the Smith County Medical Society at the Malvansos Cafe.

An open meeting was held March 14, at the Baptist church, with the following program: *Invocation*, by Rev. John Holland; two addresses, *A Plea for Humanity*, by Dr. Charles L. Gregory, Greenville, and *Progressive Medicine*, by Dr. C. M. Rosser, Dallas.

THE HOUSTON COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. W. C. Lipscomb; vice-president, Dr. S. M. Briscoe; secretary, Dr. W. W. Latham, Crockett; censors, Drs. C. C. Hill, Grapeland, L. Meriwether, Crockett, and S. M. Briscoe; committee on public health and legislation, Drs. J. B. Smith, R. W. Skipper, and L. Meriwether; delegate, Dr. C. C. Hill; alternate, Dr. E. B. Stokes, Crockett. The society meets quarterly in January, April, August and October.

THE RUSK COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. J. E. Watkins, Henderson; vice-president, Dr. A. D. Stroud, Henderson; secretary-treasurer, Dr. W. P. White, Henderson; censors, Drs. J. E. Ross, A. D. Stroud and D. P. Richardson; committee on public health and legislation, Drs. W. P. White and J. H. Spivey; delegate, Dr. Chas. A. Dawson, Minden; alternate, Dr. W. P. White.

CENTRAL DISTRICT—No. 12.

Dr. A. C. Scott, Temple, Councilor.

District Society—Dr. E. B. Baker, Gatesville, President; Dr. H. F. Connally, Waco, Secretary. Next meeting will be in Marlin, July 11.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bell—Dr. L. R. Talley, Temple; 1st Wednesday quarterly.
Bosque—Dr. C. C. Cate, Morgan; 1st Wednesday.
Comanche—Dr. Charles Ory, Comanche; 1st Thursday monthly.
Coryell—Dr. E. B. Baker, Gatesville; last Wednesday bi-monthly.
Erath—Dr. E. S. Winters, Dublin; 2nd Wednesday bi-monthly.
Falls—Dr. S. D. Whitten, Marlin; 1st and 3rd Mondays.
Hamilton—Dr. J. B. Winn, Hamilton; 2nd Wednesday monthly.
Hill—Dr. J. E. Boyd, Hillsboro; 2nd Friday.
Johnson—Dr. C. L. Edgar, Cleburne; Tuesday nearest full moon.
Limestone—Dr. M. M. Brown, Mexia; 3rd Thursday bi-monthly.
Milam—Dr. D. E. Munroe, Cameron; 2nd Tuesday bi-monthly.
McLennan—Dr. C. E. Collins, Waco; 1st Tuesday.
Navarro—Dr. E. H. Newton, Corsicana; 1st Monday.
Robertson—Dr. A. J. Sharp, Franklin; 2nd Tuesday bi-monthly.

THE BELL COUNTY MEDICAL SOCIETY met in Belton, March 1. There was a full attendance, including the following visitors: Drs. Holman Taylor, Fort Worth; Chas. Cantrell, Greenville and J. M. O'Farrell, Richmond. The following program was rendered: *Phylacogens in Hay Fever and Asthma*, Dr. J. A. Denman, Belton; *Local Anesthesia in Major Surgery*, Dr. A. C. Scott, Temple; *Laboratory Efficiency*, Dr. J. E. Robinson, Temple; *Supra-Vaginal Hysterectomy*, Dr. R. R. White, Temple; *Menorrhagia*, Dr. M. W. Sherwood, Temple; *The Medico-Legal Expert Witness*, Dr. R. W. Noble, Temple.

Question was raised before the society, concerning an article which had appeared in the daily press. After hearing the manner and cause of this article, the following resolution was adopted:

Whereas, on the 20th, day of February, A. D. 1916, an article entitled "THE SANTA FE HOSPITAL," written by Mr. D. C. McCaleb of Austin, Texas, appeared in the *Temple Telegram*, *Houston Chronicle* and other state papers, in which the name of Dr. A. C. Scott was handled in a personal and unwarranted manner, and in which the writer, according to his own written statement used without permission, the name of Dr. Scott and exhibited an utter disregard for the ethics of the medical profession therein; therefore

Be It Resolved that the Bell County Medical Society, having all the facts before it, unqualifiedly condemn the

article, as written and published, it being both inconsiderate of and inconsistent with medical ethics.

Be It Further Resolved that a copy of this resolution be published in the State JOURNAL.

The society was entertained by the local fraternity at supper, during which Dr. Holman Taylor was given an opportunity to explain the workings of the JOURNAL. He made many suggestions for furthering the usefulness of the publication to its members.

THE BOSQUE COUNTY MEDICAL SOCIETY met February 29, at Morgan. The following officers were elected to serve during the current year: President, Dr. U. D. Ezell, Kopperl; vice-president, Dr. T. C. Coston, Womack; secretary-treasurer, Dr. C. C. Cate, Morgan (re-elected); delegate, Dr. J. H. Burnett, Kopperl; alternate, Dr. C. L. Goodall, Valley Mills; censors, Drs. T. C. Coston, J. C. Garrett, Valley Mills and J. H. Alexander, Meridian. The society will meet the first Tuesday in March, June, September and December of this year.

THE COMANCHE COUNTY MEDICAL SOCIETY met in Comanche, March 2. Eleven members were present. The following officers were elected: President, Dr. A. J. Gray, Comanche; vice-president, Dr. W. J. Westbrook, Sipe Springs; secretary-treasurer, Dr. Chas. Ory, Comanche (re-elected); delegate, Dr. Chas. Ory; alternate, Dr. T. P. Weaver, DeLeon; censors, Drs. L. B. Thomas, Comanche, P. G. Hays, Sipe Springs, and I. T. Clemons, Comanche; committee on public health and legislation, Drs. T. P. Weaver, DeLeon, W. M. Hilley, Sidney, and A. M. Neal, Comanche. Several clinical cases were presented.

THE FALLS COUNTY MEDICAL SOCIETY reports the following officer, elected March 20: President, Dr. F. H. Shaw, Marlin; vice-president, Dr. H. W. Allen, Marlin; secretary-treasurer, Dr. S. D. Whitten, Marlin.

THE HAMILTON COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. M. A. Boone, Hamilton; vice-president, Dr. J. D. Currie, Hico; secretary-treasurer, Dr. J. B. Winn, Hamilton; delegate, Dr. C. M. Hall, Hico; alternate, Dr. E. E. Yarbrough, Indian Gap; censors, Drs. M. A. Boone, W. T. Bolding, Hamilton, and J. H. Wysong, Hico.

THE MCLENNAN COUNTY MEDICAL SOCIETY met March 21, at Waco. The following program was rendered: *Infantile Paralysis*, Dr. Howard L. Prince, Rochester, N. Y.; *Refraction*, Dr. Aleck Spencer; *Trachoma*, Dr. J. R. Ferrell; *Deflected Septum*, Dr. E. C. Brannon; *Acute Otitis Media*, H. T. Aynesworth; *Sore Throat*, C. P. Schenck. All of the above papers were of special interest to the general practitioner.

NORTHWESTERN DISTRICT—No. 13.

Dr. C. B. Williams, Mineral Wells, Councilor.

District Society—Dr. J. H. Eastland, Mineral Wells, President; Dr. R. A. Duncan, Graham, Secretary. Next meeting will be in Seymour, April 11-12, 1916.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Baylor—Dr. C. E. Johnson, Seymour; 2nd Tuesday.
Clay—Dr. Albert Greer, Henrietta; 2nd Wednesday.
Eastland—Dr. T. B. Busby, Rising Star; quarterly.
Jack—Dr. L. B. Wood, Jacksboro.
Parker-Palo Pinto—Dr. E. H. Bursey, Weatherford; 2nd Tuesday monthly.
Stephens—Dr. J. H. Ball, Crystal Falls; 1st Tuesday quarterly.
Throckmorton—Dr. D. C. Wylie, Throckmorton.
Young—Dr. W. O. Padgett, Graham; 2nd Tuesday bimonthly.

NORTHERN DISTRICT—No. 14.

Dr. A. W. Carnes, Hutchins, Councilor.

District Society—Dr. C. R. Johnson, Gainesville, President; Dr. H. L. Moore, Dallas, Secretary.

Secretaries of Sections—Obstetrics and Gynecology, Dr. F. A. Pierce, Dallas; Medicine, Dr. J. D. Burt, Farmersville; Surgery, Dr. J R. Lewis, Gainesville.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Collin—Dr. E. L. Burton, McKinney; 2nd Tuesday.
Cooke—Dr. Julius McIver, Gainesville; 2nd Tuesday.
Dallas—Dr. R. S. Loving, Dallas; 2nd and 4th Thursdays.
Delta—Dr. C. C. Taylor, Cooper; 1st Monday.
Denton—Dr. W. G. Kimbrough, Denton; Tuesday following 1st Monday.
Ellis—Dr. E. F. Gough, Waxahachie; 2nd Tuesday.
Fannin—Dr E. H. H. Foster, Bonham; 2nd Thursday monthly.
Grayson—Dr. Davis Spangler, Sherman; 1st Tuesday.
Hopkins—Dr. T. K. Proctor, Sulphur Springs; 1st Wednesday.
Hunt—Dr. H. M. Bradford, Greenville; 2nd Tuesday.
Kaufman—Dr. B. J. Hubbard, Kaufman; 1st Tuesday, February, April, June, August, October and December.
Lamar—Dr. M. A. Walker, Paris; 1st Thursday.
Montague—Dr. T. H. Clarke, Bowie; 2nd Tuesday monthly.
Tarrant—Dr. J. J. Richardson, Fort Worth; 1st and 3rd Fridays.
Van Zandt—Dr. D. L. Sanders, Wills Point; 1st Friday.
Wise—Dr. L. H. Reeves, Decatur; 1st Tuesday.

THE COLLIN COUNTY MEDICAL SOCIETY met February 8th, at McKinney. Dr. J. E. Gibson reported an interesting case of labor in a primpara. It was a vertex presentation in R. O. A. The pains were slow and tedious. Chloroform was administered but not to surgical anesthesia. Up to time of marked effort there was nothing to cause anxiety, though the patient was convulsive and delirious at such time as the anesthesia was given. When the child's head passed through the outlet, the cord was wrapped three times around neck. It was impossible to extricate the child and it was completely asphyxiated.

Dr. Todd Largent reported the case of a woman with unusual skin eruption, temperature 100 to 103 degrees. The eruption consisted of red irregular spots the size of a dime to five or six times that size, and elevated. After a week or ten days there was diffuse, fine desquamation. For want of a better name he had diagnosed it impetigo contagiosa. Several similar cases were reported during the discussions.

Drs. W. C. Wright, Farmersville, and Fitzhugh Wolford, McKinney were elected to membership. Dr. W. E. Rucker read a paper on *La Grippe*. He said that la grippe is a popular term, used and accepted as a diagnosis of a more or less severe infection. Pfeiffer attributes the disease to a bacillus he isolated several years ago, which he called Bacillus of influenza. Others ascribe it to the pneumococcus bacillus, catarrhallus, etc. Dr. Mathews of Chicago, claims he has isolated in most cases recently, a hemalytic streptococcus associated with other cocci. The most striking thing about the epidemic of the influenza or grip, now sweeping the country, is that many cases are not grip at all; that laboratory tests show that the true bacillus of influenza is rarely found. The organisms most uniformally present in the sputum are the Streptococcus pyogenes, Streptococcus viridans, one or several strains of pneumococci and Staphylococcus aureus, and albus. Other bacteria are sometimes isolated but is a question whether they have very much to do with the etiology of the disease. He gave the treatment in detail in these cases—elimination, spraying of the nose and throat, and quinine internally. He places the patient in bed, with plenty of fresh air, but protected from draft, limited diet, etc.

The next meeting will be held at the home of Dr. B. F. Largent, March 14.

THE DALLAS COUNTY MEDICAL SOCIETY met February 24th. Thirty-two members, and three visitors were present. The following papers were read: *Cardio-Vascular Disease*, Dr. C. M. Grigsby; *Pyelitis in Children*, Dr. C. R. Hannah.

The amendment to the By-laws, which had been previously advertised, was voted upon and lost. A communication from the Chamber of Commerce and

the Manufacturers' Association offering co-operation in securing the 1917 meeting of the State Medical Association, was read and referred to the delegates. The society endorsed a movement to secure a hospital for Oak Cliff. Dr. A. Newman was elected to membership.

THE DALLAS COUNTY MEDICAL SOCIETY met in regular session, March 9. Thirty-three members and five visitors were present. The following program was rendered: *The Male climacteric*, Dr. John S. Turner; *Cardio-Vascular Renal Disease*, Dr. W. A. Boyce. Both papers were thoroughly discussed. A motion prevailed to extend to the State Medical Association an invitation to hold its 1917 meeting in Dallas. Dr. B. F. Crabtree was received on transfer from the Johnson County Medical Society.

Dr. C. M. Rosser made a few remarks on the late Dr. Rodman.

Dr. Cary extended an invitation in behalf of Baylor Medical College, to any and all members of the society who may so desire, to make use of any of the college equipment in pursuit of scientific work.

An invitation from the Dallas County Dental Society to attend and participate in the annual meeting of the State Dental Association, was accepted. The meeting will occur May 9-12.

The following amendment to Art. V of the Constitution and Chapter III of the By-laws, was ordered advertised:

"Any officer or committeeman who shall absent himself from more than two successive regular meetings may be automatically dropped from such position of honor and his successor elected by the society, if the place is elective, or appointed by the President if otherwise."

THE DALLAS COUNTY MEDICAL SOCIETY met in regular session March 23. Thirty-three members and six visitors were present.

The minutes of the previous meeting were read and approved. Through courtesy the regular order of business was suspended to hear Judge Quentin Corley and Mr. Elmer Scott.

Judge Corley gave a most instructive demonstration of the use of his mechanical arm and hand, showing how he has made himself physicially independent of the help of others for ordinary manual functions, though he has been deprived of both hands and one arms. After his demonstration the Judge asked the society for a letter of endorsement to use in presenting his patent to the foreign governments which are now engaged in fitting their patriots for such a demand. Upon motion the President appointed a committee consisting of Drs. Carnes, Folsom and Watson, to draft a suitable letter giving the Judge the endorsement of the society.

Mr. Elmer Scott addressed the society on two phases of Human Values, *viz.* (1) Hospital Social Service, and (2) Co-operation between the Medical Service and Social Workers. The address was well received and the President requested Mr. Scott to furnish a resume of his remarks for publication in the Bulletin.

The regular program was resumed. Dr. W. C. Swain read a paper on *Enlarged Prostate; Its Pathology and Diagnosis*. Dr. J. H. Gambrell, read a paper on *The Value of the Prone Position in Gynecology and Obstetrical Cases*.

Drs. J. S. Tomkies and Jas. T. Colwick, were elected to membership. The following were received on transfer: Drs. E. Mack Parrish from Cooke County, O. J. Colwick from Hamilton County and Urban P. Hackney from Kaufman County.

The amendment to the Constitution and By-laws which had been advertised, was brought up in due form for final action. With much discussion and substitution it was passed after being changed to read as follows:

"Any officer or committeeman who shall absent himself from more than two regular meetings shall be fined $5 for each offense, or automatically dropped from such position of honor and his successor elected by the Society, if the place is elective, or appointed by the President if otherwise."

THE ELLIS COUNTY MEDICAL SOCIETY met in regular session at Ennis in March. Twenty-seven members were present. Dr. J. F. Forehand read a paper on *Two Common Health Legions*, which was well received, and discussed by several. Dr. R. W. Knox, Houston, read a paper on *Wrist Injuries*, which was illustrated with lantern slides. The same paper will be read at the State Association meeting in May.

THE HOPKINS COUNTY MEDICAL SOCIETY met in regular monthly session in Sulphur Springs, March 1, with 12 members and one visitor in attendance. Dr. T. K. Proctor read a paper on *The Diagnostic significance of the Presence of Pus in the Different Regions of the Nasal Cavity*. There were a number of interesting case reports.

THE MONTAGUE COUNTY MEDICAL SOCIETY announces the following officers for 1916: President, Dr. W. R. Potter, Bowie; vice-president, Dr. S. T. Humphreys, Nocona; secretary-treasurer, Dr. T. H. Clarke, Bowie; censors, Drs. W. W. Davis, E. E. Johnson and M. F. Sherrill; delegate, Dr. H. F. Wilton, Nocona; alternate, Dr. E. E. Johnson.

THE VAN ZANDT COUNTY MEDICAL SOCIETY met in regular session at Grand Saline, March 3. Eight members were present. Election of officers for 1916 was held, with the following result: President, Dr. V. Bascom, Cozby; vice-president, Dr. Marion L. Cox; secretary-treasurer, Dr. D. Leon Sanders (re-elected); censors, Drs. Ernest Blankinship and H. T. Fry; committee on public health and legislation, Drs. Clarence R. Williams and Andrew J. Kellam; delegate, Dr. Marion L. Cox; alternate, Dr. V. Bascom, Cozby. Time of meeting, first Friday in each month.

The society transacted some business and then adjourned to the Prebyterian Church where a joint meeting with the Mothers' Club was held.

Papers were read by Dr. V. B. Cozby on *Child Development*, and Dr. D. L. Sanders on *Care of the Baby*. Dr. J. K. P. Bowen addressed the meeting on the subject, *Care of the Eye, Ear, Nose and Throat*. Drs. M. L. Cox and W. C. Hearin made short talks along the line of baby welfare. The society will meet at Canton on the first Friday in April, 1916.

NORTHEASTERN DISTRICT—No. 15.

Dr. W. H. Blythe, Mt. Pleasant, Councilor.

District Society—Dr. R. Y. Lacy, Pittsburg, President; Dr. J. N. White, Texarkana, Secretary.

COUNTY SOCIETIES, SECRETARY AND DATE OF MEETING.

Bowie—Dr. E. M. Watts, Texarkana; 4th Friday.
Camp—Dr. R. Y. Lacy, Pittsburg; 1st Wednesday.
Cass—Dr. J. W. Shaddix, Marietta; 1st Wednesday.
Franklin—Dr. Z. C. Fuquay, Mount Vernon; 1st Tuesday.
Gregg—Dr. W. D. Northcutt, Longview.
Harrison—Dr. J. B. Baldwin, Marshall; 1st Tuesday.
Marion—Dr. S. A. Miller, Jefferson; 1st Thursday monthly.
Morris—Dr. J. K. Bates, Naples; 1st Tuesday quarterly.
Titus—Dr. W. H. Blythe, Mount Pleasant; 2nd Tuesday.
Upshur—Dr. B. W. Wood, Gilmer; 2nd Tuesday.
Wood—Dr. V. E. Robbins, Quitman; last Friday monthly.

THE BOWIE COUNTY MEDICAL SOCIETY met in regular session February 25th. The following members were present: Drs. Mann, Smith, Lanier, Center, Fuller, Kittrell, Wilder, Grant, W. H. Evans, Webster, White, Collom, Kelley, Lee and Watts. Dr.

Wm. Hibbetts, of the Cotton Belt Hospital, was a visitor.

Several communications from the Councilor, Dr. Blythe, relative to payment of dues, and active society work in general, were read. A resolution of the Southwestern Conference on Tuberculosis, providing for Federal assistance in the matter of caring for stranger consumptives in the Southwest, was adopted. Dr. T. F. Kittrell read a paper on *Intestinal Obstruction*, which received liberal discussion. By unanimous vote, the society extended Dr. Preston Hunt its sympathy, incident to his illness. A motion by Dr. J. K. Smith relative to assessing each member so much until $100 had been secured, to be used as a common fund to meet incidental expenses, was lost.

The Camp County Medical Society announces the following officers for 1916: President, Dr. C. F. Henderson, Pittsburg; vice-president, Dr. E. E. Bryson, Pittsburg; secretary-treasurer, Dr. Robert Y. Lacy, Pittsburg; censors, Drs. J. K. Bates, Lafayette, and F. H. Ellington, Pittsburg; committee on public health and legislation, Drs. J. B. Florence, E. E Bryson, R. Y. Lacy and C. F. Henderson; delegate, Dr. R. Y. Lacy; alternate, Dr. C. F. Henderson.

The Gregg County Medical Society has elected the following officers for 1916: President, Dr. L. N. Markham, Longview; vice-president, Dr. C. C. Adams, Longview; secretary-treasurer, Dr. W. D. Northcutt, Longview; censors, Drs. D. B. McPherson, W. D. Northcutt and L. N. Markham; delegate, Dr. C. C. Adams; alternate, Dr. L. N. Markham.

The Harrison County Medical Society met in Marshall, March 7th. Twelve members were present. The society unanimously endorsed Dr. W. G. Hartt for the position of Councilor. The following papers were presented: *Paturition, Its Three Stages*, Dr. W. W. Nelson; *Diagnosis of Peptic Ulcer*, Dr. J. B. Baldwin. Both papers were discussed freely.

The Morris County Medical Society announces the following officers for 1916: President, Dr. C. D. Hibbetts, Naples; vice-president, Dr. C. E. Seale, Daingerfield; secretary-treasurer, Dr. J. K. Bates, Naples; censors, Drs. R. D. Moore and E. Y. Anthony, Omaha, W. Smith, Naples; delegate, Dr. D. J. Jenkins, Daingerfield; alternate, Dr. L. Y. Turner, Daingerfield.

The Titus County Medical Society met in Mount Pleasant, March 14. Members present were, Drs. W. R. K. Johnson, D. M. Leftwich, R. E. Burrus, S. R. Crabtree, T. M. Fleming, S. C. Broadstreet and W. H. Blythe. Dr. G. P. Stoker was a visitor. The Committee on Rules, Regulations and By-laws made its report, offering the following amendment, which was adopted: Article IX shall be amended as to provide that:

Any member who shall fail to attend three meetings in succession shall be fined the sum of two dollars, and in default of payment of said two dollars, shall become automatically suspended from the society.

Dr. Johnson reported a case of double pneumonia in a child five years old, where there was extremely low temperature throughout the period of illness.

After an hour and a half spent in one of the best meetings had in a long time, those present were entertained a few minutes by Dr. Leftwich, in a recitation of how he collected a hog for a fee. He sure got the hog.

The Wood County Medical Society met at Quitman, February 25. Fourteen members were present. Drs. J. P. Browning, Hawkins and C. M. Rayburn, Como, were elected to membership. Three resolutions were presented, and will be voted on at the next regular meeting.

SOCIETY ADMINISTRATION

OFFICERS STATE ASSOCIATION OF COUNTY SECRETARIES.

W. H. Hargis, President.....San Antonio.
W. H. Blythe, Vice-President.....Mt. Pleasant.
H. L. Wilder, Secretary-Treasurer.....Glen Rose.

CHANGES OF ADDRESS.

Dr. C. D. Baker, from DeBerry to Elysian Field.
Dr. J. P. Wood, from Corsicana to Roane.
Dr. D. W. Queen, Cameron to Temple.
Dr. J. H. Payne, from Columbus to Cat Spring.
Dr. A. B. Watkins, from Prairieville to Kemp.

MEMBERSHIP, STATE ASSOCIATION OF COUNTY SECRETARIES.

The Editor: Please publish this list of county societies and secretaries that have paid dues to the State Association of County Secretaries. Something is wrong, surely, for there are 143 societies in the State and only 22 have paid dues. Ask secretaries to give me their opinion as to the trouble. The list follows:

Austin County—Dr. Otto E. Steck, Secretary.
Childress County—Dr. R. B. Wolfard, Secretary.
Comal County—Dr. L. G. Wille, Secretary.
De Witt County—Dr. B. J. Nowierski, Secretary.
El Paso County—Dr. C. F. Braden, Secretary.
Fannin County—Dr. E. H. H. Foster, Secretary.
Grayson County—Dr. Davis Spangler, Secretary.
Hardeman-Cottle County—Dr. T. D. Frizzell, Secretary.
Harrison County—Dr. J. B. Baldwin, Secretary.
Hidalgo County—Dr. W. R. Dashiell, Secretary.
Johnson County—Dr. C. L. Edgar, Secretary.
Kaufman County—Dr. B. J. Hubbard, Secretary.
Knox-Haskell County—Dr. J. E. Hammond, Secretary.
La Salle-Frio County—Dr. R. L. Graham, Secretary.
Mitchell-Nolan County—Dr. T. J. Ratliff, Secretary.
Polk County—Dr. H. P. Stewart, Secretary.
Tarrant County—Dr. J. J. Richardson, Secretary.
Throckmorton County—Dr. J. E. King, Secretary.
Tom Green County—Dr. G. W. Nibling, Secretary.
Victoria-Calhoun County—Dr. F. L. Sargent, Secretary.
Waller County—Dr. R. E. Bing, Secretary.
Wise County—Dr. L. H. Reeves, Secretary.

H. L. Wilder,
Secretary State Association
of County Secretaries.

Glen Rose, March 28, 1916.

BOOK NOTES

State Board Questions and Answers By R. Max Goepp, M. D., Professor of Clinical Medicine at the Philadelphia Polyclinic. Third Edition Thoroughly Revised. Octavo volume of 717 pages. Philadelphia and London. W. B. Saunders , 1913. Cloth, $4.00 net; Half Morocco, $5.50 net.

The second edition of this work, we are told in the preface, was considerably enlarged by the addition of a number of questions bearing on certain subjects which have assumed importance during the last few years, such as serology and vaccine therapy, the field of which is steadily widening in diagnosis and treatment; chemotherapy and the recently exploited treatments for syphilis; tropical medicine and disease caused by animal parasites; the newer cardiac physiology and the graphic methods of studying the circulation. Further developments have made still further revision of the text necessary.

"That many new questions in the lists were rejected altogether it is hardly necessary to state, while some were modified before their incorporation in order to bring them into harmony with current terminology and classification. The pernicious and

pedantic practice still occasionally indulged in by some examiners of mystifying the student by employing obsolete or unfamiliar terms instead of those in current use—in the names of drugs, for example—or of framing a question in such a manner as to mislead the candidate in regard to the answer desired, cannot, in the authors opinion, be too severely condemned. Questions of this type, when accepted at all, have first been recast in an acceptible form and, in a few instances, commented upon for the student's benefit." (Preface).

Candidates for license to practice medicine may find this a very present help in time of trouble. It embraces every branch of medical and surgical science, and supplies an exhaustive list of questions in each branch; each question has annexed such helps as are likely to be needed by the candidate. The helps given are in general both brief and clear.

CANCER. Its Study and Prevention. By Howard Canning Taylor, Gynecologist to the Roosevelt Hospital, New York; Professor of Clinical Gynecology, Columbia University; Member of the American Gynecological Society, American College of Surgeons, American Society for the Control of Cancer, American Medical Association, New York Obstetrical Society, etc. Cloth, 332 pages, 12mo, to point leaded. Lea & Febiger, Philadelphia and New York. 1915. $2.50, net.

Principally based upon an extensive hospital experience with abundant opportunities for study and observation, the author of this well written, handy little volume has presented the essentials of cause, prevention and surgical treatment of cancer. His work is entitled to the serious consideration of both the general practician and the surgeon. He recommends a wiser use of the facts now in our possession, and the more ardent and serious study of the unsolved problems, for the acquisition of more facts regarding the disease; a clearer understanding of the statistics of the clinicians; the keeping of fuller records of cancer and its treatment, and the importance of earlier diagnosis.

The book is divided into 12 chapters: I. General Consideration; II, Precancerous Lesions; III, Contagiousness of Cancer; IV, Spontaneous Cure of Cancer; V, Carcinoma and Sarcoma of the Breast; VI, Carcinoma of the Uterus; VII, Carcinoma of the Oral or Buccal Cavity; VIII, Carcinoma of the Esophagus; IX, Carcinoma of the Stomach; X, Carcinoma and Sarcoma of the Intestines, Carcinoma of the Appendix, Cancer of the Rectum; XI, Carcinoma of Gall-Bladder and Ducts, Carcinoma of the Liver and of the Pancreas; XII, Cancer of the Kidney, Bladder, Prostate, Penis and Testis, ending with a general index. The book is well made and handy.

BANDAGING. By A. D. Whiting, M. D., Instructor in Surgery at the University of Pennsylvania. 12mo. of 151 pages, with 117 original illustrations. Philadelphia and London. W. B. Saunders Company, 1915. Cloth, $1.25 net.

This little volume enters an important field and should be studied by all who are not already familiar with all there is in the art of applying bandages. It is intended for beginners, but others will find it of real value, and instructive. It is ably written and aptly illustrated. The author does not seem to recognize the wide application of which the Z. O. Adhesive strip is capable, displacing the roller bandage in many instances for a more easily applied and useful substitute, giving better service in support and compression without the discomfort and inconvenience often arising from roller bandages. Dealing as it does with the roller bandage alone, it is certainly a book worth while.

A HANDBOOK OF INFANT FEEDING. By Lawrence T. Royster, M. D., Attending Physician Bonney Home for Girls and Foundling Ward of the Norfolk Society for the Prevention of Cruelty to Children! Physician-in-Charge of King's Daughters' Visiting Nurse Clinic for Sick Babies. 12mo. cloth, 114 pages illustrated. C. V. Mosby Company, Saint Louis, 1916. $1.25.

While an excellent little work, the author of it lays no particular claim to orginality; only that he has reduced the subject matter to a compact and handy form for ready use. While a great deal is at present being written on this subject, there is unquestionably a legitimate place for it in the library of every one who is in any way concerned with the care and feeding of infants.

CANDY MEDICATION. By Bernard Fantus, M. D., Professor of Pharmacology and Therapeutics, College of Medicine, University of Illinois, Chicago. Cloth, 12mo. pages 82, 10 point and 8 point, leaded. C. V. Mosby Company, Saint Louis. 1915. $1.00 net.

Dr. Fantus has given exhaustive study to this very interesting subject, and has achieved something to be carefully considered by the enterprising physician who is unwilling to fail of popularity among those of his clientele who are not particularly fond of the disgusting taste and odors of many drugs, of which many of the older doctors were foolishly proud as distinguishing their methods from the more esthetic methods of the homeopaths.

The information given relating to candy medication, both preparations and administration, is simple and sufficient.

PAINLESS CHILDBIRTH, EUTOCIA AND NITROUS-OXID-OXYGEN ANALGESIA. By Dr. Carl Henry Davis, Associate in Obstetrics and Gynecology, Rush Medical College, in Affiliation with the University of Chicago; Assistant Attending Obstetrician and Gynecologist to the Presbyterian Hospital, Chicago. 12mo. cloth, pages 134, 10 point. Forbes & Company, Chicago. 1916. $1.00 net.

A very readable little book on a much discussed subject. It is what its title implies, and many who are interested will be more than pleased to have a copy. It discusses the entire field of "twilight sleep" and of analgesia, and tells how to use the Nitrous Oxid-Oxygen. A new book in a comparatively new field, it is well worth the price and the time to read it.

BOOKS RECEIVED.

Text-Book of Gynecology, *Gardner*.

Autoplastic Bone Surgery, *Davidson & Smith*, (Lea & Febiger).

Infant Feeding, *Royster*, (C. V. Mosby Co.)

Diagnostic Methods, *Brooks*, (C. V. Mosby Co.)

Candy Medication, *Fantus*, (C. V. Mosby Co.)

Clinics of John B. Murphy, February, 1916. (W. B. Saunders).

Handbook of Massage for Beginners, *Despard*, (Oxford Medical Publications).

Venereal Diseases, *Hayden*, (Lea & Febiger).

Treatise on Fractures, *John B. Roberts*, (J. B. Lippincott Co.)

International Clinics, Vol. I, 26 Series, 1916. (J. B. Lippincott Co.)

Progressive Medicine, Vol. XIX, No. 1, March, 1916. (Lea & Febiger).

Digest of Comments on the Pharmacopeia of the United States of America, and on the National Formulary, *Martin I. Wilbert*.

The Medical Clinics of Chicago, Vol. I, No. 5. (W. B. Saunders Co.)

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The use of the Index will be facilitated by remembering that articles are often listed under more than one head. All items of the minutes of the Annual Session will be found under "Association;" death notices under "Deaths;" County and District Society notes under "Society;" minutes and others items relating to the State Association of County Secretaries under "Society Administration;" books reviewed under "Book Notes." The abbreviations are as follows: (E) Editorial, (M) Miscellaneous, (N) News, (O) Original Article, (BN) Book Note, (SA) Society Administration, (DE) Department of Extension.

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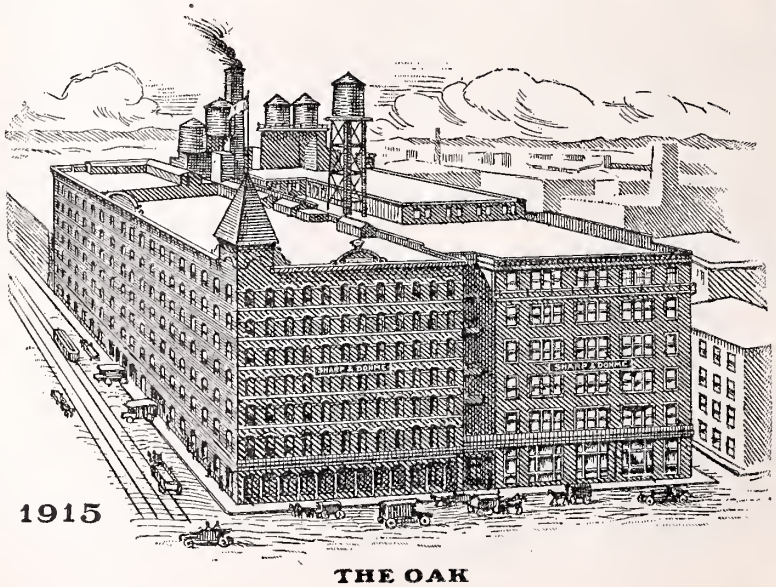

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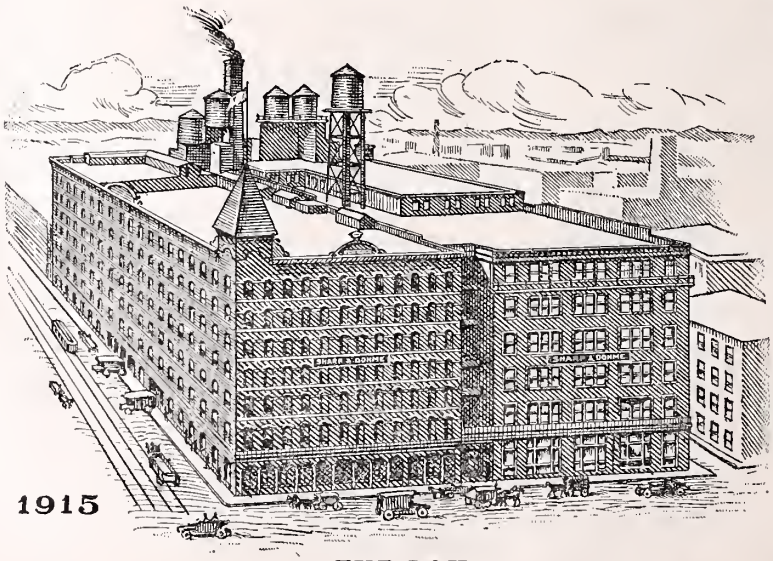

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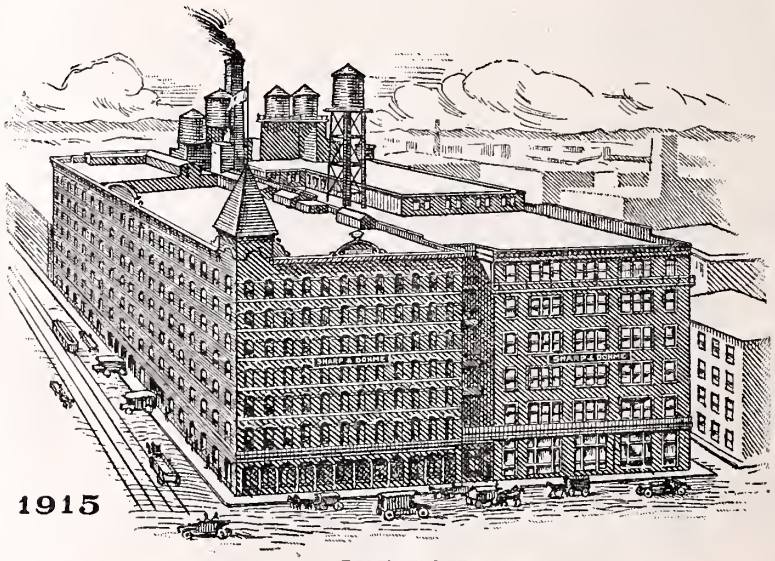

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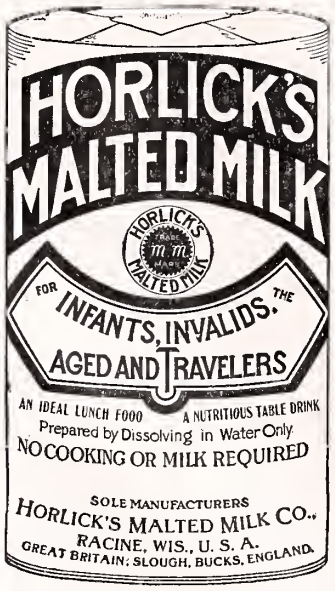

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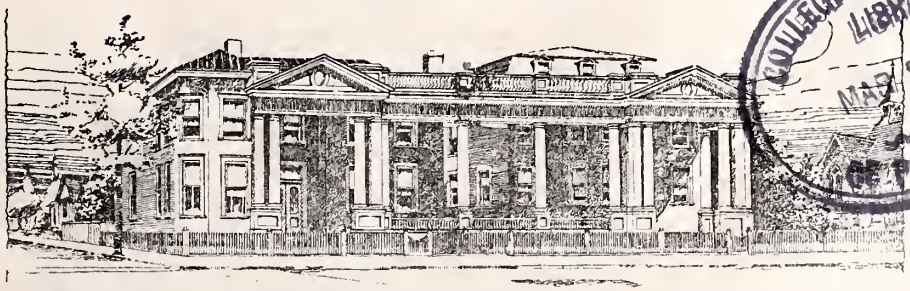

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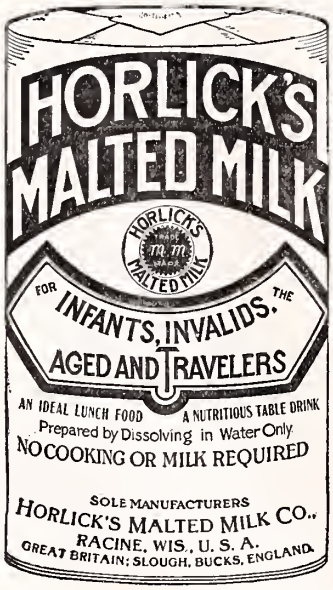

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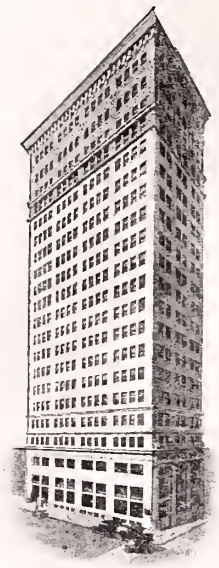

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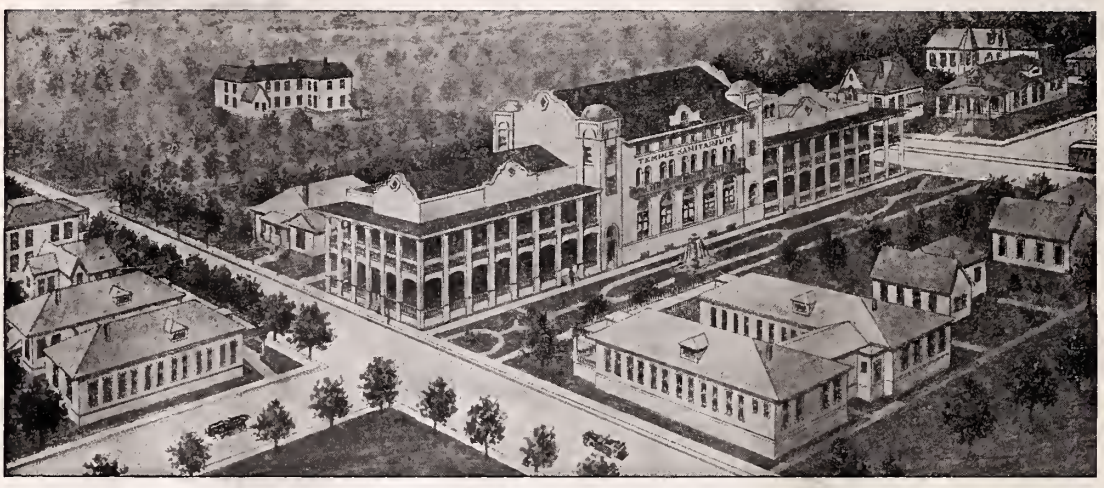

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